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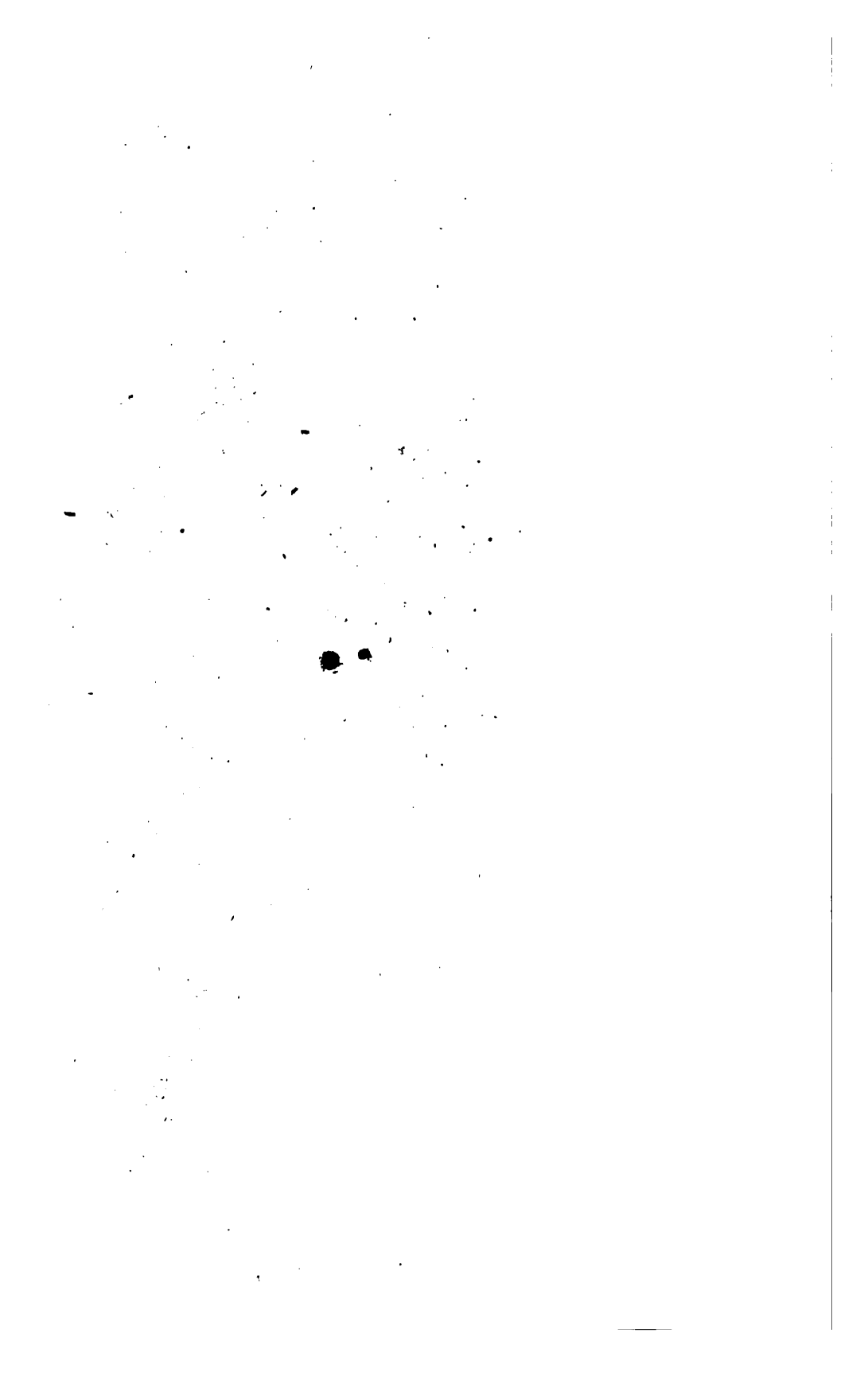

THE

MEDICO-CHIRURGICAL

REVIEW.

NEW SERIES.

VOLUME TWO.

[BEING VOL. VI. ANALYTICAL SERIES.]

CONDUCTED BY

ASSOCIATED PHYSICIANS AND SURGEONS;

AND SUPERINTENDED BY

JAMES JOHNSON, M. D.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON,
PHYSICIAN EXTRAORDINARY TO HIS ROYAL HIGHNESS THE DUKE
OF CLARENCE.

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NEW-YORK:

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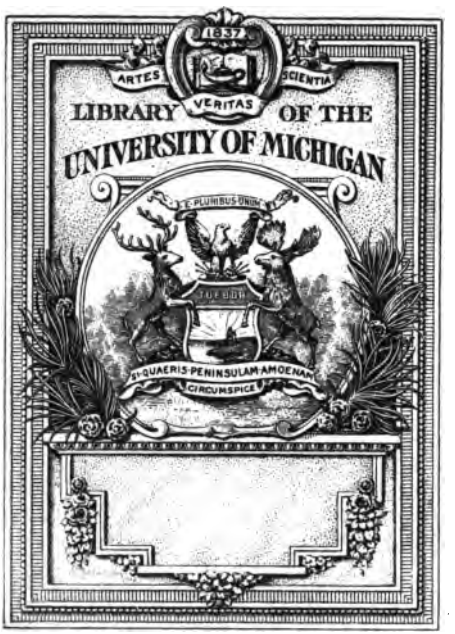
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Contents

OF

No. 3. Vol. II. (NEW SERIES) for JANUARY 1825.

[*No.* 19, *ANALYTICAL SERIES.*]

Art. I.

FEVER—CONTAGION—QUARANTINE.

1. Dr. Burnett's Official Report on Fever &c. ---------
2. Dr. Mills on Fever and Inflammatory Complaints ----
3. Dr. Maclean on Quarantine and Contagion ---------- 1
4. Mr. Wade's Observations on Fever ----------
5. Dr. Stoker's Medical Reports of the Fever Hospital

II.

Mr. Suttleffe's Medical and Surgical Cases, the result of 38 years' practice ---------- 23

III.

ANATOMY, PHYSIOLOGY, AND PATHOLOGY OF THE SKIN.

1. Mr. Chevalier's Lectures on the Anatomy and Functions of the Skin----------
2. Dr. J. L. Alibert, on the Diseases of the Skin ------ 29
3. Mr. Plumbe's Practical Treatise on Diseases of the Skin.

IV.

Essays on Various Subjects of Medical Science. By David Hosack, M.D. F.R.S. ---------- 53

V.

Dr. John Forbes on the Use of the Stethoscope and Percussion in the Diagnosis of Diseases of the Chest, with Original Cases and Dissections ---------- 61

VI.

Dr. Alison's Observations on the Pathology of Scrofulous Diseases, with a view to their Prevention ---------- 98

VII.

An essay on Curvatures and Diseases of the Spine, by R. W. Bampfield, Esq, &c. 112

VIII.

Quarterly Periscope

OF

PRACTICAL MEDICINE;

BEING

THE SPIRIT OF THE MEDICAL JOURNALS,

FOREIGN AND DOMESTIC.

I. PHYSIOLOGY.

1. Dr. Graves on Free Acid in the Human Stomach 145
2. Dr. Hamilton's Instances of Panic producing Fever 148
3. Curious Physiological Effects of Lightning 149
4. M. Bellingeri on the Spinal Marrow and Nerves 151
5. Mr. Arnott on the Physiological Effects of Ptyalism 153

II. PATHOLOGY.

1. Messrs. Cullen and Carswell on Melanosis 154
2. Dr. Craigie on Biliary Calculus 159
3. Dr. Carter on Occult disease of the Chest 161
4. Dr. Duncan on Fatal Inflammation of Veins 161
5. Post-mortem Examination of Lord Byron 164
6. Dr. Martinet on Inflammation of the Nerves 165
7. Dr. Gairdner on Perforations of the Alimentary Canal in Children 170
8. M. Louis on a peculiar Species of Gastritis 173
9. M. Bourdon on certain Organic Diseases of the Stomach 174
10. Mr. Callow's Case of Abscess in the Parietes of the Stomach 180
11. Dr. Meyers on Cynanche Trachealis 181
12. Legallois' Case of Perforated Intestine 182
13. Dr. Teeling on Suppression of Urine 183
14. Sir J. Moriarty on Hepatic Phthisis 184
15. M. Bayle on various Forms of Anomalous Gout 187
16. Remarkable Case of Acute Cerebral Affection 192
17. Mr. Carmichael on Tetanus 193
18. Dr. Gairdner on Purpura Hæmorrhagica 194
19. Dr. Crampton on Conversion of Disease 197
20. Dr. Macauley on Effects of Lightning 199
21. Dr. Vilermay on Inflammation of the Appendix Cœci 200
22. Curious Instance of Partial Intermittent Fever 201

23. Mr. Hamilton's Cases of fatal Fever from opening a Grave 202
24. Dr. Reid on the Pathology of Epilepsy 205
25. Dr. Brooke on Liver Cough 208

III. SURGERY.

1. Amputation of the Lower Jaw, by Dr. M'Clelland 210
2. Drs. Kinglake and Balfour on the treatment of Hernia .. 211
3. Dr. Wedemeyer on Paracentesis Thoracis 213
4. Mr. Hume's Case of Tracheotomy in Cynanche Trachealis 215
5. Cases of Extirpation of the Ovaria 215
6. Dr. Belcher on Chronic Enlargement of the Tonsils 217
7. Sudden death during an operation 218
8. Great Tumour removed from the Neck, by M. Dupuytren 219
9. Mr. Isaac Ryall on Purulent Ophthalmia of Infants 220
10. Laryngitis, Tracheotomy in, by Mr. Carmichael 223
11. Mr. A. C. Hutchison's Case of Hæmorrhage into the Bladder 224
12. Delpech's successful Amputation at the Hip-joint 225

IV. THERAPEUTICS.

1. Drs. Kolly and Zink on the use of Iodine 229
2. Dangers of Iodine 233
3. Dr. O'Halloran on the Treatment of Dysentery 234
4. Dr. Balfour's *striking* Cures 234
5. Dr. Crampton's Case of Poisoning by Opium 235
6. Dr. O'Halloran on the Treatment of Pneumonia 236
7. Dr. Sharkey on the Treatment of Diabetes 237
8. Dr. O'Brein on the Use of Sulphate of Quinine in Typhus 237
9. Hospital Reports from Laennec, in La Charité
   1. On Fevers 240
   2. On Pulmonic Inflammations 241
   3. On Phthisis 241
   4. On Diseases of the Heart 241
   5. On Chronic Peritonitis 242
   6. On Sciatica and Neuralgia 242

V. MIDWIFERY.

1. Dr. Payne on Puerperal Fever, with Commentaries 243
2. Mr. Sanders on Puerperal Fever 244

VI. MEDICAL JURISPRUDENCE.

1. Mr. Greenhow on Medical Remuneration, and a plan for its Improvement 246

IX.

ANALECTA MINORA, OR LITTLE PERISCOPE.

1. Mr. Amesbury on the Preservation of Dead Subjects 248
2. Emplasto-dermic Treatment of Diseases 249

3. Contagious Glanders in Horses 249
4. Corrector of Cancerous Fœtor 249
5. Non-Union of Fractures 249
6. Substitute for Castor Oil 249
7. Congestive Fever in the Sea 249
8. Preservation of the Stomach by Poison 250
9. Pathology of a Pinch of Snuff 250
10. Phrenology 251

X.

Bibliographical Record 251

XI.

OBITUARY.

1. Dr. Cleverly 256
2. Mr. Parker 257
3. Mr. O'Beirne 257
4. Dr. Bridger 258

XII.

INTELLIGENCE, &c.

1. Lithotomy, Mr. Weiss's new Lithontriptor 258
2. Valuable Collection of Books on natural History, &c 258
3. Mr. Curtis's Lectures on diseases of the Ear 259

XIII.

EXTRA-LIMITES.

I. Philo-Medicus on Self-Advertising, and on the Comparative Importance of Certain Medical Degrees 260
II. Mr. Hickes on Pregnancy complicated with Ascites 265
Additional Cases of the same 267
III. Retrospections
1. Divided Arteries 268
2. Fowler's Solution of Arsenic, an old formula 268
IV. The Surgeon and Apothecaries' Drug Company 269
V. Explanation of Mr. Weiss's new Lithontriptor 270
VI. Mr. Seaman's Shampooing Baths 270
VII. Mr. Battley's Letter on Opium 273

XIV.

Correspondence, Additional Subscribers, &c.

THE

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VOL. VI.] Analytical Series. [No. 19.

"Nec tibi quid liceat sed quid fecisse decebit
"Occurrat, mentemque domat respectus honesti."

VOL. II.] JANUARY 1, 1825. [No. 3.

[NEW SERIES.]

I.

FEVER—CONTAGION—QUARANTINE.

1. *Official Report on the Fever which appeared on Board H. M. Ship Bann, on the Coast of Africa, and amongst the Detachment of Royal Marines, forming the Garrison, on the Island of Ascension, in the Year* 1823. By WILLIAM BURNETT, M.D. one of the Commissioners of the Medical Department of His Majesty's Navy—Physician in Ordinary to His Royal Highness the Duke of Clarence,—and Honorary Fellow of the Imperial Medico-chirurgical Academy of St. Petersburgh. 8vo. pp. 78. London, July 1824.

2. *A comparative View of Fever and Inflammatory Complaints; with Essays, illustrative of the Seat and Nature of Fever.* By THOMAS MILLS, M.D. Licentiate of the King and Queen's College of Physicians. 8vo. pp. 125. Dublin and London, June 1824.

3. *Evils of Quarantine Laws, and Non-Existence of Pestilential Contagion; deduced from the Phenomena of the Plague of the Levant—the Yellow Fever of Spain—and the Cholera Morbus of India.* By CHARLES MACLEAN, M.D. 8vo. pp. 444. London, 1824.

4. *Observations on Fever.* By R. WADE, Member of the Royal College of Surgeons, and Apothecary to the Westminster General Dispensary. 8vo. pp. 83. London, 1824.

5. *Medical Report of the Fever Hospital and House of Recovery, Cork Street, Dublin, for the Year* 1823. By WM.

STOKER, M.D. Senior Physician of that Hospital, &c. 8vo. pp. 101. Dublin and London, 1824.

THE multiplied and ever multiplying objects which are presented, in quick and endless succession, to the mind's eye of the public, render it impossible that the impression left by any one of them can have more than a momentary duration in the memory. It is astonishing indeed—and somewhat mortifying to human vanity,—to observe how soon events, which shake empires, and absorb, at the time, every feeling of almost every individual in the civilized world, sink into oblivion, and, in a few months, are only remembered when some chronicle is opened that records the historical narration. The battle of Waterloo is now scarcely brought to recollection, even by the sight of the hero who won it—and the Duke of Wellington rides through the streets of the metropolis without a single finger being pointed at the conqueror of Buonaparte! Who is it that calls up to his memory the once dreaded and adored name of Napoleon! The traveller who admires his magnificent and stupendous road over the Semplon—or traces in amazement the perilous route of his army over the snow-clad summit of the Great St. Bernard!—If this be the fate then, of such great and eventful transactions, how can the minor events of literature or science expect to retain possession of the public mind for more than a moment? In our own profession, if any one subject could be quoted as an exception to this general rule, it would be FEVER. Although its very existence has long been denied in this and in some other countries, yet it has continued, down to the present time, to intrude itself most pertinaciously on the attention of the profession, and to excite controversies, discussions, and literary warfare that appear interminable. But even FEVER, the most universal of all diseases, has not been able to excite uninterrupted interest in the minds of the faculty. It is only at those periods when its destructive ravages are felt or apprehended, that the subject occupies afresh the public curiosity, and sets the press at work to evolve the jarring opinions of practitioners respecting the nature, causes, and treatment of each successive epidemic.—The West India islands, the United States of America, the swamps of Walcheren, the valleys and ports of Spain, the fortresses of Malta and Gibraltar, the distant shores of Batavia, the jungly banks of the Ganges, the mountains of Ceylon—and lastly, the United Kingdom of England, Ireland, and Scotland, have, in our own days, furnished ample materials for etiological, pathological, and therapeutical controversies, that have not yet ceased—and are still very far from having

settled the question on any one of the above important points of discussion. But, notwithstanding the discrepancies of opinion and practice that still prevail respecting fever, there is, we believe, a nearer approach to unanimity of doctrine and uniformity of treatment, at the present than at any former period since the dogmas of the schools gave way to clinical observation, pathological research, and unshackled discussion. The discrepencies too, are less than they seem. It is principally the contending parties who come before the public—the great majority of that public are pretty nearly agreed on the very points which give rise to so much controversy.

The works at the head of this article bear upon some interesting points of the etiology, pathology, and treatment of fever; but they will not amalgamate, and we must take them into consideration separately.

Dr. Burnett's official report relates to the severe visitation of fever, from which the crew of the Bann and the small garrison of Ascension suffered such an extraordinary loss of lives in the year 1823. It bears also on the question of *contingent contagion*, on which so much has been written, pro and con, proving, we think, in a satisfactory manner, that fevers, even within the tropics, are capable of taking on, under particular circumstances, a character of contagion which had nothing to do with their original production. We shall endeavour to lay before the public a succinct, but we hope, clear account of this fatal visitation.

The Bann, sloop of war, stationed on the coast of Africa, anchored off Free Town, Sierra Leone, on 11th January 1823, continuing there till the 25th March, her crew in perfect health. On the 25th March, one case of fever, with severe inflammatory symptoms, was put on the list, and terminated fatally on the 30th of the same month.

March 26th. The master and two seamen were attacked with fever, and recovered.

27th. The Bann sailed from the coast.

We must now go back a little to state that, on the 19th of March, the Bann sent her pinnace on board a merchant timber vessel, called the *Caroline*, to assist her in coming to an anchor. This vessel had sailed from Malta on the 26th September 1822, and arrived at Sierra Leone on the 3rd November, in perfect health, as appears by the official report of Mr. Shower, colonial surgeon, and Dr. Barry of Sierra Leone. She proceeded up the river on the 12th and 13th November—loaded her cargo of wood at Tomboo island, 30 miles above Free Town—lying the whole of the time in a low

swampy situation, surrounded with mangroves. About a month after she came here, she became sickly, as might be expected, and sent eight men, with the usual remittent fever of the country, to the hospital. Of these, four died. On the 28th January she drove from her anchors and stranded, but was soon got off. On the 11th February she got down to the anchorage off Free Town, having grounded on rocks and shoals, in moving down, and become leaky. She anchored about three miles from the squadron, and endeavoured to procure invalids to navigate her home. On the 22d February (nearly three months after her arrival on the coast) the Caroline sent a man to the hospital with the concentrated form of the fever. *At this time*, Dr. Barry of the hospital observes in his official report, the fever "had begun its ravages on shore." He consequently and expressly rejects the idea of the fever being communicated to the colony by the Caroline. On the 13th March, the said Caroline anchored near the mouth of the river, in Cockle bay; but the leak increasing, she returned to the anchorage off Free Town on the 19th March, with her crew much weakened by incessant labour at the pumps and constant exposure to the sun. Some of her men were again taken ill, and some ran away from her. It was at this time that the Bann, as was before mentioned, gave her assistance. About the 22d or 23d of March also, a survey was held on the Caroline by the master of the Bann, the master of the Snapper, and the carpenter and carpenter's mate of the Owen Glendower frigate. They remained on board the Caroline several hours, visiting the hold and other parts of the ship. Of all these officers, and of the boats' crews accompanying them, only one man was taken ill of the fever—namely, the master of the Bann, who suffered an attack, but was only two or three days on the sick list, from the 26th to the 28th March. It may be observed also, that the crew of the Caroline had constant communication with the boats' crews of the different men of war, at the watering-place, without any accident occurring. Finally, this same Caroline sailed for England on the 5th May, where she arrived on the 29th June, without losing a man on the voyage, though several invalids and others took passage in her from the coast.

It is also proper to state, that, in September 1822, the Bann captured a Spanish schooner (the San Raphael) laden with slaves of Whydabb, which schooner arrived in the river of Sierra Leone in the following December. On board of this vessel was a party of men from the Bann, but they suffered nothing while conducting the slaves to the colony. Afterwards, however, the said schooner was despatched with a lieutenant and 40 men to reconnoitre the Gallinas. On this cruise,

four of her men were seized with fever, but none died. She returned, and anchored near the Caroline—before the fever appeared in the Bann. According to the testimony of the surgeon of the Bann, the fever, by which they were so severely scourged, appeared first in the schooner San Raphael, where her small detachment of men suffered more in proportion than the crew of the Bann. Out of the first eight or nine who were seized in the Bann, four had been employed in the schooner—and three (two marines and a carpenter) had never been out of the Bann on any duty. The schooner was cleared of Europeans, and taken with the Bann on her voyage to Ascension.

The above digression from the narrative of the Bann was necessary, in order that the reader might be enabled to appreciate the value of that hypothesis (for really it seems little more) which places not only the fever in the Bann, but that which ravaged the colony of Sierra Leone to the account of the Caroline timber vessel!

What dire mishaps from trivial causes spring!

We now return to the Bann. She sailed from Sierra Leone on the 27th March 1823. Between that date and the 31st, three more men were seized with fever. On the 3d April, four were added to the list; and from this time the fever spread rapidly till almost the whole of the ship's crew were attacked. Of ninety-nine who underwent the fever, thirty-four died—or full one in three!—She reached Ascension on the 25th April, in a dreadful state, as may be supposed—fifteen of the thirty-four having already died. Tents were immediately pitched, at the distance of nearly five hundred yards from the garrison, the sick (45 in number) landed—and all intercourse interdicted.

The island of Ascension is well known to be a volcanic rock, less than twenty miles in circumference, with some green patches of verdure on its more elevated parts. The destination of Napoleon to the neighbouring island of St. Helena, changed the aspect of Ascension from a place of occasional turtle turning to a small garrison of thirty-five officers and men. These occupied three posts, namely, the barrack at the beach—the Springs, about four miles from the barracks—and the Green Mountain, 2500 feet above the level of the sea.

"It has been said," says Dr. Burnett, "that this island was always particularly healthy, previous to the appearance of the fever, which followed the Bann's visit to it in 1823. This statement is evidently erroneous, for I find, on reference to the Journals of the medical officers, who at different times had charge of the garrison before the appearance of the late epidemic, an abstract from which is in the Appendix, that not only has dysentery and hepatitis been

very prevalent, as well as occasional attacks of fever, but likewise that a fever, called the bilious remittent, in the year 1818, attacked almost every man on the island, which the assistant surgeon (see Appendix, No. IV.) attributes to an unusually wet turtle season, when the men are much exposed, by watching at night, to turn those animals. Moreover, there is in the Journal of Mr. Robert Malcolm, for 1818, a case of this disease, which commenced on the 1st of June, and terminated by death the next day, with all the symptoms of yellow suffusion and black vomit, &c. (see Appendix, No. V.) which are said peculiarly to characterize the yellow fever; and having shown this case to the surgeon of the Bann, now in London, he declares it to be exactly similar to the cases of fever which lately proved so fatal in the Bann, and amongst the marines at Ascension. It also appears, from the abstract above mentioned, that out of one hundred and thirty-two cases of disease, which are recorded in these Journals, twelve died and nineteen were invalided; and, though perhaps all the fatal cases are inserted in the Journal, it is well known that those documents seldom contain above a third of the cases which actually occur." p. 11.

At the time of the Bann's arrival, however, the garrison was in good health. About two days after the landing of the Bann's sick, one case of fever occurred, but soon recovered. The surgeon of the garrison dates the commencement of the fever at eighteen days from the landing of the sick seamen, viz. 11th May, when a boy was violently attacked and ultimately died. Up to this time, it appears that the restrictions between the garrison and sick sailors were little more than nominal. Several articles were landed from the Bann into the garrison, and some of the officers of the island had gone on board the Bann to bid at the sale of the effects of the deceased! These were restrictions with a vengeance! Their eyes were now opened, when it was too late; and every precaution was taken to prevent the disease being communicated to the outposts. In spite of these, fifteen individuals were taken ill at the Springs—but fortunately none at the Green Mountain, though one of the men belonging to that post had been on board the Bann. After the Bann's fever had nearly ceased, it went on spreading in the garrison, and of twenty-eight men taken ill, fifteen died—or more than one-half! Besides these, two boys and four women belonging to the marines of the island paid the forfeit of their existence.

While the Bann was at Ascension, the Driver sloop of war arrived from Sierra Leone, where she had been under the same circumstances as the Bann, yet with her crew in perfect health. Soon after her arrival, two clerks were sent from her on board the Bann—they were both taken ill—and one of them died. Two other officers who *visited* the Bann, escaped. As two or three cases of fever (one of them fatal) showed themselves

about this time on board the Driver, the captain put off to sea, and no more fever appeared. There are yet other proofs of contagion to come forward. The Bann sailed from Ascension on the 2d of June, and arrived at Bahia, on the coast of Brazil, on the 10th of the same month. In the meantime a number of relapses and eighteen new cases of fever occurred on board of her. Here she found the Creole, Tartar, Briton, and Doris frigates. A boat from the Tartar came alongside, during a heavy rain, and the boat's crew sheltered themselves on board. In a few days a number of these were seized with the fever and some of them died. In fact, it appears that the fever extended to forty-five of the Tartar's crew, of whom five died. The disease, however, appears to have been of a milder character, and no mention is made of yellow suffusion. The other ships of the squadron at Bahia continued in perfect health. Again; a boy entered on board the Bann at Bahia, from a merchant vessel, three days after which, he had a most violent attack of the fever. At this place the Bann's hold was examined, and found, in every respect, clean—"*but no examination was made under the limber boards, where all the mischief was found to be, on examining the hold of the Pyramus, which ship had suffered about a year before, so severely in the West Indies, from yellow fever.*" P. 17. Before making any remarks of an etiological nature, we shall introduce the following extract from Dr. Burnett's report, bearing on the symptoms and *post mortem* appearances.

"It will be sufficient to observe, that the disease commenced with symptoms of high excitement, and a yellow appearance of the eyes, followed in many cases by vomiting of bilious matter, and by irritability of stomach; frequently by diarrhœa, after the first cathartic, and by great depression of strength, dark yellow suffusion, and death. Captain Phillips mentions, in his letter to me, that two fatal cases had coffee-coloured vomiting; and I have reason to think that this occurred in more instances after he left the island; but many had neither that symptom, nor indeed any vomiting or irritability of stomach whatever.

"The morbid appearances found on *post mortem* examinations, were chiefly confined to the mucous coat of the stomach and intestines, though many of the neighbouring parts showed marks of inflammation; the former generally contained a large quantity of a liquid of a dark colour different from bile. The villous coat in many parts slightly inflamed, and the whole lined with a white glairy mucus. The same appearances extended more or less to the intestines, and the vessels of the mesentery were enlarged. The treatment consisted, in the beginning, of liberal evacuation by the lancet, and purgatives, and in the progress of the disease, calling in the aid of various other remedies, such as calomel, the cold affusion, blisters, &c. often without any benefit. I must, however, observe, that as far as I can judge, no remedies were better calcula-

ted to meet this truly formidable and intractable disease. I am far, however, from advocating the indiscriminate or unmeasured use of the lancet, though I have no hesitation in saying, that, when employed early and judiciously, it is one of the most certain and powerful means of arresting or controlling fever that we are acquainted with; and it is only justice to add, that in my opinion, the medical officers performed their duties not only with ability,* but with the utmost attention and humanity. Nothing would be more unfair than to regard them, from the mortality that took place, as having failed in the former: let any unprejudiced person look at the character of the disease, displayed in its symptoms, rapid progress, and morbid appearances, after death, and point out a better plan of treatment, not from the closet in England, but at the bedside of the patients, under such circumstances, as those gentlemen had to contend with."† p. 13.

We now come to two interesting questions—Was this fever in the Bann contagious? Where did it originate? We think that few men, not completely blinded by prejudice, or wedded to some favourite doctrine, will reject or doubt the evidence which has been brought forward, respecting the contagious character which the fever evinced in the Bann, both at Ascension and Bahia. If this evidence be questioned, it is in vain to look for farther testimony in human affairs. But the other question, of the origin of the fever, is by no means so easily disposed of. Four sources of the fever may be conjectured or suspected—1st. The climate of the coast, and the ordinary causes of disease—2d. Contagion from the Caroline—3d. Ditto from the San Raphael—4th. Local causes in the ship's hold.

1. The *first* cause is that which the surgeon of the Bann accuses, in conjunction with intemperance on the part of the crew—and much exposure to the sun while refitting the ship and her tender the San Raphael. It may be objected to this source, that the other ships at the same anchorage continued healthy. This, at first sight, appears insuperable. But if we recollect that a very slight difference in the *discipline and occupation* of a crew, will make all the difference between sickness and health, the objection loses much of its force, and the surgeon's opinion is far from unreasonable.

* The author of the "Select Dissertations" justly observes, at page 285, that "this disorder, like all others of a pestilential and malignant nature, sets at defiance the art of physic in its curative capacity; human skill, of which the most anxious and judicious exertions have not been wanting, has been found of little avail in abating the fatality of this epidemic."

† Dr. Barry says, in his Medical Report from Sierra Leone, for 1823, "the only patients who escaped were those in whom *early* venesection was had recourse to."

2. That either the Bann or the Colony received the fever from the Caroline, after the circumstances which we have detailed, will not be credited by any man in his senses (Sir Gilbert Blane excepted); and therefore we shall not waste words on this topic.

3. The San Raphael Tender appears, on a superficial glance, to be a much more probable source of infection than the Caroline;—and one of our respected cotemporaries* seems to have come to the conclusion that the febrific miasm was generated by the slaves (themselves escaping) and propagated afterwards among the Europeans both in the Tender and the Bann. But let us recollect that the European navigating crew of the San Raphael prize were on board, *along with the slaves*, from September till some time in December, and returned to the Bann *in perfect health*—that afterwards, another English crew were put on board of her, while she was sent up the river Sierra Leone thirty miles to have her bottom repaired, which crew suffered no sickness—that still longer afterwards, she was sent out on a cruize off the Galinas with a lieutenant and forty men, where she had only four men sick, none of whom died, and all of whom, with the crew, returned well or convalescent to the Bann—and finally, that it was after all this, that her little crew became sickly while lying at anchor in the same place with the Bann—will it be believed the febrific miasm of the slaves now at last came into action and gave rise to the tragic scene that ensued? We cannot bring ourselves to such a conclusion.

4. It has now been well ascertained, from fatal experience, that while we are seeking for external sources of contagion, we have the enemy in our own bosom. Between the timbers and planks in the holds of vessels miasmata have been generated that scattered destruction among the unsuspecting crews above. The Pyramus was a recent and melancholy example. To this source we are strongly inclined to attribute the fever in the Bann, aided by the atmospheric exposure and intemperance alluded to by the surgeon. It is not a little in favour of this local origin that the fever began forward in the ship and came gradually to the after part, till nearly all the officers and men were affected. Still, however, it must be confessed, that much obscurity hangs over the origin of the fever, both in the Colony and in the Bann, which we need not now expect to remove.

Dr. Burnett professes to belong to the moderate, and we believe more numerous party, who believe that yellow fever, so called, is generally originated from other causes than contagion,

* Vide London Medical Repository, No. 8, p. 145. August 1824.

though it may and does assume a contagious character occasionally, under peculiar circumstances. In elucidation of these positions Dr. Burnett brings forward several authentic documents, which have never before been made public. Of these we shall take notice of two or three.

1. The Bedford, of 74 guns, sailed from St. Fiorenzo Bay, in the island of Corsica, on the 29th July, with several other men of war, and arrived at Gibraltar on the 24th August, her crew in perfect health. Here they caulked the ship, *and the shingle ballast was shifted in the hold*. On Sunday, the 6th September, when the ship's company was mustered, there was not a man on the sick list;—but in the course of one week, from this period, they sent upwards of 130 to the hospital with yellow fever.

"The general symptoms," says the Surgeon in his Journal, "were a cold and hot paroxysm, quickness of pulse, head-ache, nausea, general and great debility, and, in two thirds of the cases, local pains in some parts of the chest. The debility, in many cases, was so great, that sentinels at their post, and sailors in the common duty of the ship, fell down as if struck by lightning, without any previous complaint whatever, and as far as I was able to remark, the danger was in proportion to the degree of this symptom. On the second or third day of the disease, all their skins acquired more or less of a yellow tinge; and in the worst cases (at the hospital) were of as deep a dye as any thing I have ever seen—the yellow fever of the West Indies not excepted. Eleven died at the hospital before we left Gibraltar (24th of September), and others were dangerously ill." p. 30.

Here three things may be observed:—*First*, The fever was accompanied by yellow suffusion, as deep as in the worst cases of the West India yellow fever. *Secondly*, There was no assignable cause for it, excepting the shifting of the ballast in the hold. *Thirdly*, It evinced no contagious character on board or on shore—because accumulation was not permitted, and cleanliness and ventilation were enjoined. This fever in the Bedford is quoted by Sir Gilbert Blane (Select Dissertations, p. 288). Though the real object of quotation does not appear very clear.

2. His Majesty's ship Kent (74) had been cruising off Toulon, from the 29th April till the 26th June, when she anchored in Port Mahon harbour, crew healthy. From thence she sailed on the 1st July, with a convoy for Gibraltar. On the 6th, 7th, 8th, and 9th of July, 170 men were taken ill with the fever, and the sick list increased on the passage to, and at Gibraltar. There were in all 240 cases, of whom eleven died. Yellow suffusion was universal, and the surgeon of the ship denominates the fever—"*the causus icterodes, or ardent yellow fever.*" The sick being distributed into empty

transports prevented an accumulation which would doubtless have proved very deleterious. Even as it was, the surgeon states that the fever evinced a contagious character in some instances on board the transports, after the sick had been removed into them. The cause of this fever, in all probability, might be fairly traced to febrific agents in the harbour of Port Mahon.

We shall now take a short glance at another quarter of the globe.

3. The Pyramus frigate sailed from Plymouth, and arrived at Antigua, where she lay thirty-four days in English Harbour. After this she went to several other places, returning to Barbadoes on the 9th November. The fever on board of this ship, is said first to have broken out in English Harbour, Antigua, and daily increased—a considerable number having died in the hospitals of Antigua and Barbadoes, where the sick were landed. A sea cruize had no effect in mitigating the disease. On the contrary, the fever went on increasing, and therefore on the 14th January the provisions and stores were removed by slaves, at Antigua. "Yet six weeks after every person had been landed, it was a common occurence for six or seven to be taken ill daily arising, as it may be presumed, from their frequent communication with the sick." At length, the limber boards in the hold were taken up, when such an offensive smell issued forth as caused fainting in some on the spot, and several of the officers attending on this duty were immediately seized with the fever.

"The state of the hold, under the limber boards, is compared by Staff surgeon Hartle, to a bog of the most pestiferous nature on shore; and Mr. Comrie mentions, that three or four of the slaves employed in cleaning the ship were attacked with the fever. I may here observe, that previous to the sailing of the Pyramus from England, she had had her magazine fitted on a new plan, and that the shavings and chips resulting therefrom, instead of being removed from the ship, were unfortunately suffered to remain in the lower part of the hold, and thus mixed with the bilge water under the limber boards.

"Dr. Fitzgerald states, that some time previous to the appearance of the fever, the foul state of the hold was sufficiently indicated by smells of a very disagreeable nature issuing therefrom, and diffusing themselves over the ship, and that a candle, when placed at 'the mouth of the hold,' was immediately extinguished; and I was also informed by an officer of the ship whom I formerly knew, and whom I lately saw in the royal hospital at Haslar, that all the captains of the hold had lost their lives." p. 38.

Dr. Burnett states his conviction that the fever on board the Pyramus had nothing to do with the injection of coal-tar as

was at first suspected.* The mortality in this ill-fated ship was dreadful—upwards of seventy men died out of a frigate's crew! No contagious character was evinced in this case.—Not so in the next.

4. The Scout sloop of war, with a crew of 102 men, arrived in Port-Royal on the 13th May 1822, from England, in health. Here, however, there was some intemperance, and a good deal of exposure to the sun by day, and dews by night.

In the course of three weeks nine were sent to the hospital with fever, of whom four died. The Scout sailed on the 14th June and arrived at the Havana on the 28th. During this passage from five to seven cases of fever were daily added to the list. At one time there were upwards of thirty confined to bed, most of them with the black vomit and delirium. We have seen the surgeon's journal—and well might he say—"Human eye cannot have witnessed greater wretchedness and misery than existed on board at this time." We are very sorry that Dr. Burnett did not state the actual proofs of contagion evinced by the fever in this ship, because they are equally authentic, and if possible, more unequivocal than those exhibited in the Bann and at Ascension. We have seen the original documents and can vouch for the highly contagious character of the fever. Dr. Burnett is also *perfectly* satisfied on this point. "The instances of contagion," says he, "mentioned by the surgeon, appear to me so unequivocal that it is altogether unnecessary to say a word on this head." We do not think so—for the anti-contagionists are just as obstinate, and require just as strong facts to open their eyes as the ultra-contagionists. In this small vessel thirty-one died out of a crew of 102!

Dr. Burnett concludes with some observations on the two prominent symptoms, yellow suffusion and black vomit, which are well deserving the attention of the controversialists on both sides. If the *first* be taken as a criterion of yellow fever, Dr. Burnett can aver that, in the Mediterranean, he has

* "We have the most decisive proof of the innocuous nature of coal-tar in the case of the Owen Glendower frigate, commanded by the Hon. Captain Spencer: she, being injected in the same manner as the Pyramus, proceeded to the South Seas, and after an absence of more than three years returned to England, having lost only one man, from a chronic complaint, who was in ill health before the ship left this country.

"At the different dock-yards where the process has been carried on to a considerable extent, no effect prejudicial to the health of the people has been produced, and the same may be said with respect to those employed in procuring this article from coals. Dr. Paris has been so kind as to examine some air taken from the pump-well of the Pyramus in the West Indies several months ago, and found it as pure as common air."

seen many hundred instances where the yellow suffusion became "darker and darker," without the disease exhibiting any symptoms of contagion whatever.

"But we have different versions respecting the yellow suffusion, and in an account of this disease, as it has prevailed at Gibraltar, which a late writer praises as the best he has seen, we are told that 'when the disease terminates favourably, it is rarely attended with yellowness of skin, which if it does take place, is of a very pale lemon colour.'

"This was certainly not the case with the two last epidemics which afflicted that garrison, and, I have reason to think, will not be found correct as applying to the fevers of the West Indies in general. My own opinion is, that yellow suffusion forms no distinctive mark of yellow fever. It is a common attendant on the febrile diseases of all warm climates or seasons. It has been observed long ago, in summer, amongst the marines exercised on South Sea Common, in the neighbourhood of the Morass, near Portsmouth, as mentioned by the late Doctor Lind; and more recently amongst the marine artillery, who suffered so much from remittent and intermittent at Fort Monckton.* I have seen it also in cases of purely sympathetic fever. The truth is, that the yellow suffusion is more or less dark in some, and altogether wanting in others, and hence, preserving no regular appearance, cannot be taken as a pathognomonic symptom, and though the word 'yellow fever' may produce an appalling influence on the mind, from the associations connected with that terrible name, yet, when viewed in all its bearings, we find that in more temperate climates it may form a leading symptom in fevers of a comparatively mild description.

"As to the black vomit, every one knows it is almost an inevitably fatal symptom. The recoveries after this has taken place, are indeed 'few and far apart,' and I readily acknowledge, that it is a much more frequent attendant on the fevers of the West Indies than on those of the Mediterranean; for, in the former, the disease generally runs its course more rapidly, often leaving but little opportunity of employing curative means, and resisting every mode of treatment; while, in the latter, more time is generally given, and hence the disease is not nearly so fatal; yet even here I have seen deaths as early as the third day, with all the aggravated symptoms attending the fatal cases of tropical fevers, viz. yellow suffusion, black vomit, and speedy putrefaction of the corpse." p. 47.

Here we must take leave of Dr. Burnett, referring to his very candid and sensible report for various interesting partic-

* "The yellow fever, according to Lafuente, a celebrated Spanish physician, broke out in Medina Sidonia in 1801, when all the sea-port towns of Andalusia enjoyed the most perfect health. This city is situated at least thirty miles in the interior of Andalusia, and is a proof of the local origin of the Spanish epidemics, which no sophistry can overturn."—See Burnett on the Mediterranean Fever, 2d edition, page 491.

ulars which we cannot state in this place. No practitioner proceeding to a tropical climate should be without this official report, which contains most important facts and data that cannot be too carefully treasured up in the mind.

We now come to Dr. Mills's publication. We very much respect this gentleman for his zeal and talents; but we cannot blind ourselves to the fact that the worthy Doctor has got a crotchet in his head which sets all his music out of time. Upon this false note Dr. Mills has thrumbed from beginning to end of his book. Every body knows the noise that has been made in the world for nearly twenty years past, respecting the identity of fever and inflammation;—one party placing the seat of the phlogosis in the head, another in the stomach or bowels, and a third in some other fancy organ. Dr. Mills has chimed into the same path, and seemingly unmindful of Ploucquet, Marcus, Clutterbuck, Broussais, and a host of others who have preceded him, hopes "that the *new views* here taken of fever, and the *various lights* in which it is placed, may serve to render our ideas in respect to its nature and mode of treatment *clear and satisfactory*."* Now, we do aver that, were Dr. Mills's new views admitted and acted on, chaos would come again. But there is not the smallest danger of such an event.

Our author, after much study, no doubt, discovered that all severe inflammations, especially of internal organs, were accompanied by *fever*. It was only necessary, therefore, by a little gratuitous assumption and strained analogy, to prove that all fevers *were* inflammations, differing not in their nature or treatment, but only in their seat.

To begin at the beginning then, the first parallel is naturally between phrenitis and typhus. In *both* there is head-ache, delirium, heat of skin, frequency of pulse, &c. *Ergo*, they are both the same disease. Just as Dr. Mills had finished his triumphant parallel, the unlucky idea of *contagion*, as an attribute of *typhus*, crossed his mind, and also its occasional *epidemic* character. Such stumbling blocks are nothing in Dr. Mills's way. "On these points, however, a diversity of opinion exists, and some perhaps will go so far as to say, that these distinctions are more imaginary than real." Thus the stubborn *facts* which we have brought forward in the early

* We cannot conceive how Dr. Mills could be so indiscreet as to claim the title of "new views" for a doctrine of fever, precisely similar to that of Ploucquet, who, more than twenty years ago, averred that fever was sympathetic of inflammation of the brain, stomach, intestines, &c. and hence divided typhus into cephalic, gastric, splanchnic, &c. &c.

part of this paper respecting contagion, are swept away by a single touch of the brush of sophistry.

The parallel between erysipelas and typhus affords our author great satisfaction. Erysipelas appears to be typhus in the skin—and typhus is erysipelas of the brain or its membranes.

There are not many who would institute a parallel between ophthalmia and typhus. In ophthalmia there is head-ache —so there is in typhus. There is intolerantia lucis in both—in short ophthalmia, according to the "new views," is typhus of the eye.

"Again, the symptoms proper to Ophthalmia, as, intolerance of light, pains in the eye-balls, suffusion of the eyes, and even loss of vision, occur not infrequently in Typhus: and it is well worthy of our notice, that, whereas in Ophthalmia the inflammation, spreading from the eye to the brain, produces the symptoms of Typhus; in Typhus, the reverse of this takes place; the affection of the eye proceeds from that of the brain, showing the extension of the inflammation from an internal to an external organ." p. 11.

Finally:—

"Such is the comparison I would institute between Ophthalmia and Typhus, diseases which, on a superficial view, appear not merely different, but even opposite, in their characters; yet, when more closely examined, are found to be essentially the same." p. 12.

By similar chains of reasoning, Dr. Mills makes out to his own entire satisfaction the identity or great similarity of pneumonia and typhus—of enteritis* and typhus—of puerperal fever and typhus—of hepatitis and typhus—of gastritis and typhus—of small-pox and typhus. Our readers will not expect us to waste time in commenting on these forced comparisons and over strained analogies. We are extremely sorry to see such a man as Dr. Mills employed on such hopeless undertakings.

It is well known that, to the advocates for the identity of fever and inflammation, ague or remittent formed the most troublesome stumbling-block. The numerous disciples of Broussais have been for years endeavouring to explain away this phenomenon—and have, at length, effected their purpose, by discovering a class of *intermitting inflammations* to correspond with *intermitting fevers!* Dr. Mills appears either not to be acquainted with this discovery of the continental anti-entologists,† or else it is not quite satisfactory to him—he there-

* Dr. Mills is always quoting Dr. Mosely. Has he forgotten that that sapient physician adopted the idea of Sydenham, that "dysentery was a *fever* turned in on the *guts*." So much for these "new views."

† Those who maintain that fever may exist independent of a local inflammation, are branded by the disciples of the new light with the name of *Entologists*.

fore takes, in this instance at least, a "new view" of the affair, and boldly denies the existence of such a thing as an intermittent fever! "If," says he, "fever ceases, and then returns after an interval of one, two, or three days, *whither does it go, and whence return?* Can fever be absent and present at one and the same time?" These are curious questions. Does Dr. Mills suppose that fever is an entity which exists seperately from the body? Is it not an assemblage of phenomena—which assemblage may cease for a time and then be renewed, without any great violence to reason or credibility. Will not a head-ache, a colic, and many other complaints cease for a time, and then be renewed? But leaving reasoning aside, we join issue with Dr. Mills on a matter of fact which every medical practitioner can decide upon by the evidence of his own senses. Dr. Mills asserts that there is no *intermission* of fever in an ague, but only a *remission*—in short, that the word apyrexia in this disease is a solecism. Now we appeal to those who have seen ague on a large scale, and especially after it has continued for some time, whether they have not observed numerous examples of complete apyrexia between the fits—where the person ate and drank heartily on his good days—had a quiet pulse, cool skin, and every secretion and excretion regular? The fact is incontrovertible. What respect therefore can we have for a man's theories who, in our faces, denies facts of the most clear and evident kind—and that for the purpose of bolstering up a clumsy hypothesis which cannot stand without crutches. Really we have no patience with such trifling. Of what use is it for Dr. Mills to occupy many pages in proving, what has been known and observed since the days of Hippocrates, namely, that an intermittent will change into a continued fever, and continued fever into an intermittent. We do not affirm that intermittent and continued fevers are essentially different in their natures. All we contend for is, that they do not necessarily depend on (though they may occasionally be accompanied by) a local inflammation. All Dr. Mills' cases and commentaries on the identity of the two kinds of fever, are completely thrown away. They prove nothing towards his hypothesis.

At page 71 we find our author congratulating himself on the change which has taken place in the treatment of fever, modestly presuming on his own instrumentality in the happy revolution. We shall only hint our belief (a belief grounded on some acquaintance with what is going on in the medical world), that the doctrines maintained by those who identify fever and inflammation, have led to a system of ultra-depletion which is now producing a recoil in the public mind that bids

fair to end in a complete counter-current, and consequent return to the old system of debility and putrescency. This has ever been, and ever will be the case, when men run into outrageous extremes. Such extremes must produce their own remedies—and, as in many other instances, the remedy may be nearly as bad as the disease. We rely on the good sense, however, of the profession, and hope that the great majority will avoid the dangerous extremes of viewing fever as always depending on inflammation on the one hand, or debility on the other. The practitioner should come to the bedside of a patient in fever without prejudice. He should examine the condition of the organs and functions—relieving those that labour most by local or general depletion; but always bearing in mind that there are many fevers which will run a course in spite of all medicines, and consequently, that we are not to squander away the blood of the patient at the beginning, with the fallacious view of cutting short the disease. Nothing can authorize *profuse* bleeding in fever unless there be *unequivocal inflammation* of an organ, revealed by the common characters that proclaim inflammation under other circumstances. We are well aware, indeed, that in all, or almost all fevers, there is some one organ or part that suffers more or less of inflammation or congestion, from previous susceptibility. But we also believe that, in a great majority of these cases, a constant attention to the functions of the bowels and skin will conduct these slight phlogoses to a safe termination. In this disease, dissection, like most other good things, has caused some evil, and led into some error. The consequences of fever have been set down as its causes. This is a point of danger which we have often descanted on—and we find one of the ablest pathologists of the age in which we live, inculcating the same doctrine. The organic changes which we find after death from fever, Laennec affirms, are "*evidemment posterieures a la fièvre*, et ne peuvent, par consequent, être regardées comme sa *cause*, quoiqu'elles puissent quelquefois en augmenter l'intensité ou produire une veritable fièvre *secondaire et symptomatique*."* It is our firm belief, that it is this *secondary or symptomatic fever* which has led Dr. Mills and others into all the mazes of error through which they have run, and through which they have dragged so many others. The doctrine is replete with danger in the hands of inexperience, and calculated to bring a rational system of treatment into unmerited disrepute. We repeat our belief, that idiopathic fever

* See Laennec's Hospital Report in the Revue Medicale for May 1824, page 163.

has an existence—that it is not *caused* by local inflammation; and that the *latter*, when it does take place, is only an accompaniment or contingency, and not at all the essence or source of the fever.

Dr. Mills has given us several short distinct essays on fever, its causes, and its treatment, which contain much judicious advice, but still tinctured with the leaven of erroneous doctrine that pervades the whole work.

At pages 111–12–13, Dr. Mills has embodied fifteen *reasons* "for considering fever not infectious." We shall oppose to these fifteen *reasons*, one solitary *fact*—the catastrophe at Ascension. Let the public judge between us.

And this naturally brings us to Dr. Maclean's work. We are disposed to think much better of this extraordinary writer than we did a few years ago. For a long time, we suspected that Dr. Maclean was writing for notoriety, and preaching doctrines and opinions (like some of the priests whom he ridicules) in which he puts no credence himself. We are now convinced that there is a dark speck in his mind's eye, in consequence of which he could not see *contagion*, even if it presented itself in the tangible shape of a brace of buboes in his own groins. A man in such a state of adumbration is rather to be pitied than censured:—and, as his lucubrations have long ceased to make the slightest impression on the medical profession, it is but charitable to let the author have the full enjoyment of thinking and proclaiming himself more enlightened than all his brethren put together. We have no doubt that monomaniacs feel a greater pride and pleasure in maintaining their delusions, than philosophers ever experienced in evolving the most sublime truths, or men of science the most important discoveries—in other words:

> Whatever Nature has in *sense* denied,
> She gives in large supplies of useful *pride*.

Thus we see that human happiness is nearly balanced, even between those wide extremes, the fool and the philosopher—a fact that may well humble the vanity of man, while it proclaims the wisdom of his Creator!

But to return to Dr. Maclean. We have absolved this author from all *intention* to deceive or mislead the public—he himself being the misled and deceived. We also give him credit for unconquerable zeal—a zeal which we have reason to believe, ran counter to his best interests, and was subversive of his prospects in this country. So far he appears to have acted on principle—and that a disinterested principle. But, alas! zeal, principle, good intentions, are not always con-

nected with good or useful pursuits—they are too often enlisted under the banners of error! The venerable Jackson and the eccentric Maclean left their homes to wander through countries scourged with plague and pestilence, where their lives were daily hazarded in the cause of science. Their object was *apparently* the same; but the modes of attaining it were very different. Dr. Jackson travelled in search of truth —Dr. Maclean, to confirm a preconceived opinion, and that an erroneous one. The former saw both sides of the question, and has recorded what he saw with simplicity and candour. The *latter*, either shut his eyes upon, or, as we hinted before, was completely blinded to, every fact that militated against his favourite doctrine. The consequence has been, that, from Alpha to Omega of Dr. Maclean's researches and investigations, we see nothing but the special pleader carefully setting before us one side of the picture dressed out in all the colours, tropes, and figures of oratory; while the other side is most studiously kept concealed from our view, or, if unavoidably exposed, so distorted and bedaubed as to be scarcely recognizable. We shall quote a passage from Dr. Maclean himself, which we have no doubt will justify the foregoing remarks. It is well known that our author, full of chivalrous valour in his crusade against the contagion of plague, entered the Pest Hospital at Pera, convinced that the enemy he pursued was a mere phantom of the imagination. *Five days afterwards*, a brace of buboes in his groins announced to him that he had caught a tartar. In fact, he was seized with the plague. Now whether the presence of this disease opened his mental eye for a moment to the light of truth—or that he was seized with a transient fit of candour—or, which is most probable, that his vanity would not permit him to conceal so formidable an adventure as that of grappling with the plague in a Greek pest-house; but so it was, that he *did* record a fact which damned his own theory. Dr. Paris, in his Medical Jurisprudence, took occasion to advert to this fact, in the following rather sarcastic language. "What can be the *organization* of that man's *mind*,* who goes into the Greek pest-house at Constantinople, and, according to his own statement, is attacked *on the fifth day* after he entered it, with the plague, and yet continues to assert that the malady is non-contagious?" Now let us see how our special pleader makes out this accident in the pest-house to be a *proof of the non-conta-*

* By the way we are rather surprised that so logical and orthodox a writer as Dr. Paris, should talk of the *organization of the mind*. If the mind be *organized*, it must be composed of *matter*—and such doctrine must be the doctrine of materialism.—*Rev.*

gious character of plague ! ! It is a comment on Dr. Paris's paragraph.

" Differences of conclusions, I suspect, must depend rather upon mental furniture, than organization; and the phænomenon which appears to have excited so much suspicion in the minds of so many of my learned colleagues, might probably admit of a solution by a slight craniological process. If on the one side we should find the protuberances of pestilential contagion, whether of cholera, plague, yellow fever, typhus, dysentery, diarrhœa, or even scurvy, in full vigour, while on the other side they had either never existed or are wholly obliterated, will not such a difference naturally account for the greatest possible difference in conclusions ? But without waiting for the *post mortem* appearances, which can only be of use to our successors, let us examine this phænomenon by the lights of our reason, upon the grounds that are actually before us. The proposition of my commentators, as far as it can be analysed, is, that a plague which attacks a person in a *Greek* Pest Hospital *at Constantinople, on the fifth day* of his residence, *must* depend upon *contagion*, and *cannot* depend upon *any other cause*. Now, *causâ argumentandi* I will grant them all this ; and then let us see what will be the consequences. There were twenty persons in health, or in a few instances with slight ailments, who had resided for months or years in the hospital, and were in daily communication with a succession of pestiferous patients, yet had not the disease : but if twenty persons in health, or with slight ailments, can be for months or years in daily intercourse with pestiferous patients, without becoming pestiferous, whilst one only who was so circumstanced, was affected ; is not the conclusion inevitable, that the disease is not contagious ? Here then, supposing that the fact of contact were evidence of contagion, there would be *twenty to one* in respect to number, without reckoning time, against the disease by which I was affected at the Greek Hospital, being the product of a specific *virus*." 380.

Setting aside the ill-timed attempts at wit and humour in the above passage, where there should have been nothing but serious argument, what will our readers think of Dr Maclean's inference, that, because twenty persons who had been for months or years *accustomed* to the contagion of plague escaped, while he (a fresh man) was quickly affected, it is twenty to one against the plague being contagious ! Yet these are the kinds of argument brought forward through a great part of his work—arguments that might do very well for a wrong-headed reformer in the House of Commons, but which must greatly injure a medical writer in the eyes of his brethren—the only legitimate judges.

In respect to the quarantine laws, every well-informed man, we believe, wishes their revision, and deprecates many of the

restrictions which are laid on commerce, not only here, but in the Mediterranean, where they are ten times more vexatious. We conceive that Dr. Maclean has rather retarded than advanced this desirable change, by the intemperate manner in which he attacked the settled opinions of his brethren as well as the laws of his country. This was not the way to procure legislative ameliorations, as the event has shown. It is now quite useless to attempt any appeal to parliament for years to come, after the disclosure of the visionary and erroneous doctrines which Dr. Maclean forced on the notice of the national council, the College of Physicians, and the profession at large. We hope, however, that the result of this enterprise will prove a warning to future adventurers.

It will be seen that Dr. Maclean has strangely, but somewhat artfully, jumbled together plague, yellow fever, typhus, dysentery, diarrhœa, cholera morbus, and even scurvy, ridiculing the idea of their being contagious. But no one ever dreams of coupling contagion with one half of the above list; at least none but a few septuagenarian drivellers in their second childhood, who ought to be playing with their rattles instead of entering the field of contention with their great-grand children.

Finally, we have no hope that any thing we have said, or indeed that any one can say, on the subject of contagion shall awaken Dr. Maclean from the delusive dream, or "fool's paradise," in which he has lived so long. Notwithstanding that volume after volume rolls from his prolific pen, and lies, in its turn, neglected by the public, still Dr. Maclean is as sanguine as ever! In fact, as the following quotation will show, he already considers himself as the victor, and that plague, pestilence, contagion, and quarantine, are prostrate beneath his feet.

"Had I perished in the course of my experiments in the Levant, it might with some plausibility have been said of me by these commentators, as Mr. Tully has said of Dr. M'Adam, that I fell a victim to my want of belief in the contagion of the plague; they would have been credited by the multitude, great and small; and epidemic disease might have remained contagious, and sanitary laws have been employed 'to *chain* those *hurricanes* of the human frame' for ages to come. But

> "I survive,
> To mock the expectations of the world;
> To frustrate prophecies, and to raze out
> Rotten opinion." 382.

Two small works still remain to be noticed in this article. The first is Dr. Stoker's Hospital Report. It presents a considerable contrast with the speculative production of Dr. Mills. It is principally occupied with numerical and statistical state-

ments which cannot be analysed. We find, from tables carefully composed, that the average rate of mortality in fever, from 1804 till 1824 in the Dublin Fever Hospital, was (in round numbers) as one in fifteen. The greatest mortality (in the years 1807-8-10 and 23) was one in eleven. The least mortality was one in thirty, in the year 1818—the year in which there was the greatest number of admissions. In the severe forms of genuine typhus fever, the average mortality has generally been one death to four recoveries; or one in every five admitted. Our author, who has had almost unparalleled experience in fever for more than a quarter of a century past, entertains sentiments somewhat different from his countryman, Dr. Mills, as will be evinced in the following extract.

"Simple Fever arises from morbid actions, which do not produce any change in the structure of parts,—*Symptomatic Fever* from morbid actions produced by change in the structure of parts,—and Typhus Fever from certain morbid changes, primarily in the fluids, which produce morbid actions, and sometimes change of structure in the parts. The relations which these three classes of fevers bear to each other may be illustrated by familiar examples in surgery,—the heat and redness produced by friction being taken to represent Fever; an incised or lacerated wound to represent Symptomatic Fever; and a wound by which poison or virus was introduced, to represent Typhus Fever." 22

Again:

"The result of dissections, instituted with a view to the nature of Fever, by Dr. Beddoes, and by Mr. Kirby, and Dr. M'Cartney, in answer to my own and subsequently Dr. Barker's queries, corresponds with that of the *post mortem* examinations that I have witnessed; and, inasmuch as altered structure of parts was thus proved not to have taken place in numerous instances, on minute inquiry, it is quite conclusive, that altered structure cannot be deemed an essential characteristic of fever, a conclusion which cannot be affected by any subsequent evidence, however that may go to prove that Typhus Fever frequently supervenes on inflammatory diseases, or that it as frequently discloses organic affections which had been previously latent." 24.

Our author truly observes, that the advocates for the inflammatory nature of typhus fever have pursued their anatomical researches through every cavity of the body—from the brain and spinal marrow to the minutest distribution of the nerves. Each, in turn, has discovered in some instances what he looked for; "but as frequently each has overturned the opinion of the preceding inquirer respecting the seat of the fever." The following observations are rational enough.

"The great source of the discrepancy of opinions which has taken place amongst those engaged in *post mortem* examinations, respecting the nature and seat of Typhus, has been, as I suppose,

that at certain seasons of the year, and peculiar states of the weather, in which inflammatory diseases prevail, and inflammation, as is well known, falling in certain seasons and conditions of the atmosphere, on some parts of the body more than others, then the local affections thus excited impress their characteristic marks on structure; these, possibly, are rendered more obvious when Typhus Fever supervenes, to the attacks of which the debility consequent on such inflammatory distempers, or the incident confinement in the miasmatous damps of the dwellings of our poor render them peculiarly susceptible." 25.

For the numerous cases detailed by Dr. Stoker, his remarks on the humoral pathology, his tables, and statistics, we must refer to the little volume itself, which contains a great deal of practical information.

Mr. Wade's brochure is "expressly intended for the notice of students," and they will certainly do well to peruse it. The author properly observes, that "blood-letting has great charms with most students:—there is at once a boldness and decision in the remedy which pleases them—besides it is surgical."

"It has appeared to me of late, that their great error has been to treat fever too much (more) like a mere local inflammation than as a disease which is probably to last for two or three weeks, and perhaps longer." vi.

Truly this is not the error of students alone. They would not commit it did they not see their masters do the same. The little work in question is calculated to disenamour the student of particular theories imbibed from particular teachers and writers. It inculcates rational conduct; and evidently proves, that the writer is possessed of good sense, and has exercised a considerable share of observation in the institution to which he is attached.

II.

Medical and Surgical Cases; selected during a Practice of Thirty-eight Years. By EDWARD SUTLEFFE, Queen Street, London. 8vo. pp. 628. August 1824.

THIS work incontestably proves, that fun and physic are not incompatible substances, especially where the *latter* is dispensed—not swallowed.

Mr. Sutleffe relates his *experience*, not in the whining cant

of a methodist, with long face, down-cast eyes, and twirling thumbs—but in a fine original vein of serio-comic earnestness and jocular piety, of which we shall adduce some exquisite specimens anon. Of anecdote Mr. Sutleffe has been a rare collector; nor are wit, humour, (or at least desperate attempts at them) and satire scattered with sparing hand through this curious volume. He has many a sly fling at the M. D.'s and more than once hints that they ought to go to school to the old general practitioners, to gain medical information. Whether the result of our author's thirty-eight years' experience, now published, shall impress the new society of physicians with a conviction of this necessity, we know not; but one thing is certain, that Mr. Sutleffe will be canonized as a medical SAINT among the godly of this metropolis in consequence of the present performance. His motto is,

"In every work regard the writer's *end*."

But for our own parts we do not see clearly what the public has to do with either the *end* or the *beginning* of a writer. It is with his book they have business—and Mr. Sutleffe's very appropriately *ends* with the "application of leeches to the anus"—having begun, somewhat ominously, with the subject of *mental derangement*, and the great efficacy of "ground ivy" in that wide spreading complaint. So great indeed was our author's success with this remedy, in the beginning of his practice, that he had thoughts of becoming a mad doctor—"until a few unsuccessful cases checked his confidence." However, he "had an urgent *message* to attend the Duchess of Chandos," who was non compos in consequence of the death of the Duke; but whether he went, or what success he had with her Grace, is not stated. At this period, "our late beloved King George III, *of scripturally pious and blessed memory*, laboured under a paroxysm," and our author, "so sanguine and patriotic were his feelings," waited on Dr. Reynolds to propose the "ground ivy," but here we are left in the dark respecting the result.

While relating an unsuccessful case, Mr. Sutleffe, incidentally discloses his ideas respecting the pathology of mania, which, according to his *post mortem* researches, consists in an enlarged state of the cerebral vessels, *producing* "a constant impetus of blood, quite incompatible with correct ratiocination." Whether Mr. Sutleffe's memory begins to fail, we know not; but after relating several cases of insanity where ground ivy completely failed, he adds this paragraph:—"I cannot call to mind an individual case of mania where the glecoma hederacea has had a full trial, without effect, and eventually recovery." P. 8.

We shall be able to touch but on a very few of the beauties of this most wonderful volume. We must, however, treat our distant readers with a few specimens.

1. In a case of puerperal fever, Dr. John Sims and our author were completely baffled, and had only the mortification "to witness deeper advances towards despondency;" in the midst of which "the scene partook not of the house of mourning, but might rather be thought a little epitome of the abode of bliss." Being pressed for a prognosis, our author stated that, "in reference to the laws of the obstetric art," the patient must die; but as Dr. Sims and himself had now turned over the case to GOD, it was possible she might recover. It does not appear that the DEITY undertook this case of puerperal fever, for the lady died, and, says our author, "the *mystery* was developed immediately on her decease." What this *mystery* was, we are not told—unless the reader can glean it from the following sublime and "scripturally pious" passage.

"Fraught with instruction in its progressive stages, this case may be said to have been singularly honoured in its termination; for the children of the deceased came forth with one consent to join themselves in a perpetual covenant to the Lord and his church, where they now shine as polished pillars in the temple of truth and grace.

> Saints, at your heavenly Father's word,
> Give up your comforts to the Lord;
> He shall restore what you resign,
> Or grant you blessings more divine." 19.

2. The next scene which our author describes was not quite so celestial. Mr. Sutleffe and Dr. R—— were attending a patient in Holborn, "where the healing art proved abortive." One day while they were entering the doctor's carriage, they indulged rather freely in a laugh—most likely at one of Mr. Sutleffe's anecdotes; but their merriment was somewhat interrupted by the following exclamation from the sick house—"*See how these doctors are humbugging us!*" This brought the two Medicos as quickly to their senses as if each had swallowed a glass of the "juice of ground ivy." The doctor quailed for his next day's fee—and all hope of a bonus on Mr. Sutleffe's bill vanished into air—thin air.

3. *After pains* are to Mr. Sutleffe quite inexplicable, "no obstetric professor has hitherto been able to assign a consistent cause for them." "We should think certainly," says our very intelligent author, "that the non-existence of nerves in the

funis would preclude the possibility of transmitting impressions to the fœtus in utero, and there are those who absolutely deny altogether that this occurs. But such persons cannot have largely mingled with the social circle." What, in the name of Heaven, has the existence or non-existence of nerves in the funis to do with after pains? What has the funis at all to do with the matter? The author very properly observes, however, that—

"We must come out of our retreat and mingle with the busy hum of men, rub off our rust by friendly collision, and submit ourselves to the rasp of irony and criticism, in order to lower our pointed and consequential conceits."

4. *Aphonia.* We will do Mr. Sutleffe the credit of being a most candid narrator of his experience. He relates the unsuccessful as well as the successful events of his practice—which is no mean merit in these days. Our author is a great admirer of old women—and observes, page 55, "that old women do as well as old men—and sometimes better." In illustration of this aphorism, he mentions two cases of aphonia which completely baffled him. The patients applied to an old woman in the neighbourhood, who speedily cured them with "gin and oatmeal."

5. *Fatal Hæmorrhage from a Bubo.* Mr. Sutleffe was summoned to a young man with sloughing bubo, and where "the pulsation of the iliac artery was awful." The artery burst and the patient quickly bled to death. "I have since thought that a ligature applied to the artery might have suspended the bleeding, if not have saved his life." On returning home, our author reflected on those apocryphal words—"Oh, Adam! what hast thou done?" We would beg leave to add—Oh, Sutleffe! what hast thou *left undone?*

6. *On Flannel.* Mr. Sutleffe has a mortal antipathy to flannel—and why? Because it is prohibited by the Prophet Ezekiel, [xliv.] in these words—"They shall not gird themselves with wool that causeth sweat." In corroboration of scripture he has observed, "that those who continue flannel in immediate contact with the skin, are more susceptible of catarrh or quinsy than others." He has long noticed this fact—but admits that "he may be under a delusion."

7. *Uric Acid.* Mr. Sutleffe is possessed of an immense number of nostrums, picked up in the thirty-eight years ex-

perience. One is a compound of rhubarb, soap, and oil of juniper which *sweeps out* the kidneys, ureters, and bladder, when incommoded with red gravel. "I call it the *besom*, and it is thought to be an appropriate name in the circle in which I move." 167.

8. *Medical Etiquette.* Mr. Sutleffe has favoured the profession with a short sermon on this interesting subject, the nucleus or text of which appears to be this. He went on an excursion to the North, and entrusted his business, pro tempore, to a neighbouring practitioner, who was a German, and who, to his shame be it told, diddled Mr. Sutleffe out of a patient. Mr. S. meeting the German one day afterwards, accosted him thus :—"You should have been acquainted with the Dutch Proverb, that—*there is nothing got by stealing, nor lost by praying.*" Mr. Sutleffe's prayers appear to have prevailed; for some time afterwards the German "was literally kicked out of doors" by the patient whose allegiance he had perverted.

9. *Hoarhound Tea keeps a Saint out of Heaven upwards of Twenty-four Years.*

"In the autumn of 1800, I was asked if I wished to see a triumphant saint expire. 'Much more,' I replied, 'than to see Rome in all her pristine or present glory.' I was accordingly directed to call on Mrs. W——, of the Surrey-road, which I did, in whom I beheld the nearest approach to an animated skeleton I ever expected to see. She instantly recognised me (having often met me at the sanctuary,) and shook hands feebly. She was 'on the mount of God's unchanging love.'" 242.

Mr. Sutleffe had the cruelty to administer hoarhound tea, which prevented the saint from "going home." When informed she was out of danger, she shed tears of grief. She has retired to Warwickshire instead of Paradise, and is got quite lusty. What a misfortune!

10. *Sleep.* Mr. Sutleffe can give you a scriptural recipe for every thing. It is often asked, and foolishly asked, how many hours should we sleep? Mr. Sutleffe appears to like a comfortable nap, and quotes the Bible, as usual, for the best authority. "It is vain for you to sit up late, to rise early, and eat the bread of sorrows." *Psalms.* John Wesley ("whose reward in Heaven I presume is *far superior to that assigned to the Rev. John Toplady*") adjudged six hours sleep to a man, seven to a woman, and eight to a fool. Mr. Sutleffe's "chosen minister often smiles and says we all require the fool's hours." 281.

11. *Breath of a Child sucked by a Cat.* Mr. Sutleffe has had "*proof positive*" of this fact, (though he saw nothing of the circumstance) in a case, where the father actually caught puss stealing the breath from his infant in the cradle! It was fourteen days before the child recovered from the effects of this wicked theft of the cat.

12. *Snuff.* Mr. Sutleffe takes snuff *only* on two occasions. 1st. "To prevent a dozing disposition at public worship."—Oh, fie, St. Sutleffe! And 2ndly. "To correct a repulsive exhalation from a diseased subject." He lately got the contagion of scarlatina in his nose, having left his snuff-box behind him. A pinch of snuff, procured at Stone's End, Borough, completely destroyed "all sense and idea of contagion."

13. *Presence of Mind in a Resurrection-man.* A mendicant on London Bridge, while bolting a piece of meat in a hurry, was suffocated on the spot by a portion entering the glottis. A crowd was quickly collected. A resurrection-man rushed through them, burst into tears, and cried, oh, my brother! The sympathising spectators soon procured a hackney-coach, in which the resurrection-man quietly conveyed the corpse to a dissecting room, and pocketed the premium.

By this time our readers will begin to think they have had specimens enough of the volume under review, and so think we. About 100 pages of the conclusion of the work are occupied with miscellaneous papers, not medical but chiefly religious. Of these we shall only present our readers one single sample. *Mr. Sutleffe* having been an eye-witness of the transaction, it must of course be credited, as of recent occurrence; but, if our memories do not deceive us, there is something of the kind in Joe Miller.

"During my attendance upon Mrs. M——, of Creed-lane, one Monday morning, to take my leave *pro forma*, she astonished me with the account of the following occurrence:—'O! Sir, I wish you had been here yesterday morning, the whole neighbourhood was in a roar of laughter; that house,' pointing to the south, 'has long borne a bad character. On Saturday evening an old gentleman brought in a young lass,' (the latter, by the way, was the lesser delinquent), 'and early on the following morning she contrived to escape without the knowledge of her paramour, and took with her his large bundle, exulting in her unknown prize, and exclaiming she had 'bilked the old fellow.' And what do you think it contained? Why nothing less than the sacerdotal robes of a dignified clergyman. The poor man, upon the discovery of this loss, could not refrain from uttering his grief and disappointment before them all; for 'what shall I do?'' he observed;

she had even taken his sermon with her, and he had engaged to preach it for a public charity, a few miles north west of the metropolis, (I am unwilling to exhibit the name of the place,) where he told his wife and daughters he should sleep.' 'O! Sir,' added Mrs. M——, 'what a crying shame!'

"It was not possible, for some period after the recital, to compose myself so as to *appear sober abroad;* and I was obliged to wait until I could get my risible muscles into some order. On my reaching home, we had a second edition of the story." 577.

What an edifying homily for Mrs. Sutleffe and her daughters!

In taking leave of our author we will give him a piece of advice. We recommend him to distribute the whole impression of his work among his patients and friends. The numerous, or rather innumerable cases it contains will do just as well for them as the best specimens of pathology and practice that ever saw the light. The work will impress them with a vast idea of Mr. Sutleffe's skill, experience—and godliness. It will thus make his fortune; whereas among the medical profession it never will have any circulation—and if it had, it would only injure the author. This is rough, but it is wholesome advice.

III.

1. *Lectures on the General Structure of the Human Body, and on the Anatomy and Functions of the Skin. Delivered before the Royal College of Surgeons, of London, in the Courses for* 1823. By THOMAS CHEVALIER, F.R.S. T.S.A. &c. Surgeon Extraordinary to the King, and Professor of Anatomy and Surgery to the College. 8vo. pp. 277, plates. 1824.

2. *Descriptions des Maladies de la Peau Observées a l'Hôpital Saint-Louis, et Exposition des Meillieurs Methodes suivies pour leur Traitement.* Par J. L. ALIBERT, Medecin de cet Hôpital, &c. &c. Avec figures coloriés. Paris, 1814-15.

3. *A practical Treatise on Diseases of the Skin, comprehending an Account of such Facts as have been recorded on these Subjects, with Original Observations. The whole arranged with a View to Illustrate the Constitutional Causes of these Diseases, as well as their Local Characters.* By SAMUEL PLUMBE, Member of the Royal College of Surgeons of London, of the Medico-chirurgical Society, &c. 8vo. p. 392, two plates. London. Underwoods, June 1824, (price 16s.)

THE skin, while it is the most extended organ in the human body, is very curious and complicated in its structure—very diversified in its functions—widely related in its sympathies—and prone to numerous diseases. So numerous, indeed, are its diseases, at least in appearance, that they have been made to cover nosological charts large enough for the study of a whole life! Even the *perusal* of Willan and Alibert is a task of no trifling difficulty; for although the eye may be amused with the *beauty of deformity* in the plates, the memory and judgment are distracted, fatigued, and ultimately dispirited by the innumerable distinctions without difference—or differences without use. Yet the study of the skin, in regard to its structure, functions, and disorders, is extremely interesting, and not more interesting than useful. We must not, therefore, allow the difficulties of the study to deter us from the pursuit of it—for after all our embarrassments, disappointments, and fatigues, we shall reap ample reward for the time and attention bestowed on the subject.

I. ANATOMY.

Mr. Plumbe has very properly observed, that a great defect in most writers on dermoid diseases is, "the absence of due consideration of the anatomy and physiology of the skin." He has himself, however, dedicated only a very few pages to these curious and important subjects—probably from a fear of extending a work which it was a great object to keep within restricted limits. We shall begin with the—

1. *Cuticle.* This alone has occupied several of Mr. Chevalier's lectures; and although this ingenious and lamented surgeon has amplified his subject beyond all reason, by a profusion of unnecessary, and too often affected verbiage, yet we are inclined to agree with him in most of his ideas respecting the structure and functions of this curious and important portion of the body's covering. By many anatomists the cuticle is considered as an inorganic, insensible—in fact, *unliving* structure—a mere indurated secretion from the vessels of the true skin. But to this opinion we cannot subscribe. The very circumstance of its remaining in the most intimate contact with the subjacent *living* tissue, is, to us, a proof that it possesses some degree of vitality itself—at least, in its under surface. We are inclined to the opinion of Chaussier, that, as it approaches the true skin, it becomes endued with a *shade of organization.* "Car à sa surface interne il offre encore une sorte de tissu spongieux un peu humide, qui permet de lui supposer de ce coté *une ombre d'organization* d'autant plus

marquée qu'il se rapproche plus du derme." It is the most imputrescible of all the soft parts of the body, and, as Sir James Smith has well observed—" it forms a fine, but essential barrier between life and destruction, both in animals and vegetables." "Tact," says Mr. Chevalier, " in all its gradations; temperature, in its different influences and changes; absorption and exclusion, in their numberless variations, and under an infinite diversity of circumstances; perspiration, in all its degrees, takes place through its well-fitted and appropriate structure"—a structure which he observes, is subjected to the domination of the principle of life—" and constituting a large and distinctly organized expansion." Mr. C. considers the cuticle as nourished by vessels ramifying on the cutis. It is constantly in a state of reproduction and decay—its exterior surface dying off in furfuraceous scales or minute particles, while its interior portion is renovated to supply the waste. We all know how profusely perspiration will pour through this structure—and how readily substances will be absorbed into the body through the same—and yet, strange to say, no pores can be seen by the best glasses. With the hope of clearing up this mystery Mr. Chevalier made some microscopical observations.

" I took some portions of cuticle from various parts of the body, and laid it in the field of a microscope, magnifying 140 times, with some glazed dark blue paper under it, hoping to detect the pores, by the coloured paper appearing through them; but I could find none that could be properly called by that name, except where it was evident it had been perforated by small hairs, which it had quitted. Instead of pores, I found an infinite number of minute velamina, regularly arranged, of exquisite tenuity, presenting a follicular appearance, and separated from each other by bands of a thicker substance, crossing and intersecting them, so as to render them distinct, as represented in the drawings, which have been made by my son." 134.

" The mystery now appeared approaching to a solution: for if the terminal vessels of the cutaneous apparatus, of which I shall have more to say in a subsequent lecture, are lodged, as I fully believe them to be, in these velamina, (of which, though perfectly distinct, I attempted in vain to count the number in the fortieth part of a square inch,) so long as the vessels maintain a vital connexion with them, they transmit their secretion through them, as through a bibulous, and exquisitely hygrometrical covering, of the finest delicacy and perfection; while, through the same medium, and dependent on subjacent tubes taking a contrary course inward, absorption is carried on to a great, but less certain extent and continuity. The whole purpose which could be answered by pores, or holes, as the term is commonly understood, is thus fulfilled by an arrangement, which, while it answers all the purposes, avoids all the inconveniences of perforatory pores, as it obviates all

chance of extravasation within, of hurtful exposure without, and of confusion in either direction." 135.

When this vital union is destroyed, as in a blister, for instance, the cuticle becomes incapable of continuing its transmissive office with any certainty or regularity, being reduced to its merely chemical and mechanical properties of endurance. Hence the accumulation of fluid under its surface. Mr. C. thinks that this structure is not without analogy in the body. "The inhalation and exhalation which are constantly going on in the air-cells of the lungs, appear to take place in a manner almost or precisely similar."

The functions or uses of the cuticle have been already alluded to, and are admitted to be most important, even by those who deny it vitality or organization. Its appearances and density vary exceedingly according to the perpetually changing duties of the parts it covers, without interrupting the two grand purposes of unceasing protection and of transpiration. The hands of the black-smith or glass-melter and the delicate sempstress or watch-maker, will afford contrasting examples of cuticular variety and adaptation.

2. *Rete Mucosum.* It is now fashionable to deny the existence of the *rete mucosum*—excepting in the negro. We would ask what becomes of this part in the offspring of the negro and white? This question alone, we think, may assure us that however difficult of demonstration in the *latter*, it still exists there, as well as in every shade of colour from Albino to Ethiopean. Mr. Plumbe offers the authority of Lawrence and Gordon (and he might have added Bichat) for the non-existence of the rete mucosum in the white. Mr. Chevalier is of a different opinion.

"It has been by some considered as a lamina of the cuticle itself; but it is no such thing; being altogether different in its ostensible properties, and intended and adapted for very different uses. It should rather be called the second, or interior Epidermis, for reasons I shall presently explain. It varies much in its colour in the natives of different countries, from the fair Circassian to the dusky Negro; and considerable variety is also evident in persons of different temperaments, inhabiting the same climate, and exposed to similar circumstances of parentage and habit. It is in general readily separable, with due care, from the cuticle. It is much more equable in its thickness, softer in its composition, and seems placed as a more certain, yielding, and delicate intermedium between the variable and insensible cuticle itself, and the vascular and nervous and sensible substance of the true cutis. In consequence of this, it serves at once duly to graduate and pre-

serve the sensibilities of the cutis, and to secure the regular and appropriate performance of its numerous functions." 145.

Malpighi considered this body as a mucous substance secreted by the papillæ of the subjacent dermis, and serving as a kind of soft varnish in which resided the colour of the skin. This opinion has been adopted by Sabatier, by Cuvier, and by others. But Bichat denied this piece of anatomy. On separating the epidermis from the dermis he could find no rete mucosum; and therefore concluded, that when this body appeared after maceration, it was the effect of decomposition. He maintained that the supposed rete mucosum was a net-work of vessels formed by innumerable ramifications and anastomoses of those which traversed the corion; and that these vessels, sanguineous and lymphatic, constituted, on the surface of the corion, (intermediate between this last and the epidermis) a capillary system, the seat of exhalation and absorption, and the secretory organ which furnished a fluid that gave colour to the skin. "Que ce systême capillaire soit à la fois le siege des exhalations et des absorptions, et en meme temps l'organe secreteur du fluide particulier qui constitue la substance qui colore la peau." After Bichat, M. Gall examined this part, and pronounced it to be constituted of cineritious, nervous, or medullary matter destined to give origin to the convergent nervous fibres, &c. "Il veut que cet enduit grisatre, signalé par Malpighi, M. Cuvier, et autres, et nié par Bichat, soit de la substance nerveuse grise, destinée la, comme a toutes les peripheries des divers systêmes nerveux à donner naissance aux fibres nerveuses convergentes qui retournent sur la ligne mediane, vers la premiere origine des systêmes nerveux des sensations tactiles, à celle du coté opposée pour former des commissures." More recently M. Gaultier has published a memoir on the rete mucosum, in which he not only advocates its existence, but attempts to show that it is composed of four different layers which he has minutely described. We have brought forward these opinions of eminent anatomists to show that, however divided they may be respecting the structure of the rete mucosum, they all agree (for we cannot exclude entirely Bichat) in its existence.

But to return to Mr. Chevalier. This gentleman has criticised the opinions of Bichat, and accused him of inconsistency in his account of the rete mucosum. He cannot account for its being black in the negro and white in the European, no more than he can account for bile being yellow in an ox and green in a turtle. "It affords, he thinks, a soft nidus for the vascular and nervous structures of the complicated organ which it invests, both under pressure, and exposure to changes

of temperature. It adds to the smoothness, softness, beauty, and delicacy of that organ; preserving its sensibilities, and the balance of the circulation in its extreme vessels, with more perfect precision than could be secured without it." The removal of it from any part of the surface is always followed by much inconvenience, and sometimes requires the suppurative process to secure its restoration, when the detachment of the cuticle alone could be repaired by a much simpler process, and in a manner less expensive to the constitutional powers. The various degrees of intensity with which blisters act, show all these circumstances, especially in children and persons of delicate constitution, on whom, in general, they ought not to be allowed to remain longer than is sufficient to elevate the epidermis. If the rete mucosum be also separated, especially from an extensive space, it is no uncommon thing for the vascular and even the coriaceous surface to slough. Mr. C. has seen many lives lost from this occurrence.

3. *Dermis, or True Skin.* The structure of this portion has given rise also to great disputes and diversities of opinion among anatomists. Till Malpighi's time, very ridiculous and erroneous views had been entertained of this structure; and since his time, his descriptions and opinions have very generally prevailed. That great microscopic observer divided all that was under the epidermis into three laminæ, viz. the rete mucosum—the papillary structure—and the corion, or hide. The papillary apparatus was considered by Malpighi as produced by the extremities of the nerves, which after traversing the innumerable holes or pores of the subjacent corion, were formed into the papillæ or organs of tact. Some anatomists considered this papillary structure as entirely composed of nervous matter, and therefore, the organ of sensation only:—but others averred, that into the composition of the papillæ entered the extremities of exhalents and absorbents, and consequently that it united the functions of feeling, perspiration, and absorption. But we must hear what Mr. Chevalier has to say. He begins with the vascular system of the skin.

He had discovered many years ago, that all the vascular surface of the cutis was minutely pencillated or villous; but did not consider this of any consequence till he more recently discovered the *velaminous* structure of the cuticle. In the cuticular laminæ, then, lined and assisted by the rete mucosum, "the penicilli or villi terminate, or are embedded, and carry on their ultimate duties."

"This structure is supported underneath by a perfect net-work,

of more obvious construction, and of more easy detection; which, though so minute as to be seldom recognizable distinctly by the naked eye, is in reality composed of numerous trunks of vessels, for the regular supply of the ultimate arrangement. Of these, the anastomoses are innumerable: the plan is perfect. The disturbance of one part of this highly organic surface is, in a state of regular health, instantly supplied by the coadjutorship of that in its immediate vicinity; so as not greatly, or long, to interrupt the discharge of its functions. All this fine and well-guarded apparatus is spread upon the corium, and may be compared to the colours of the skilful painter, blended upon his canvass, which at once not only manifests their combination, but secures the final effect of their requisite proportions. This net-work is supplied by larger vessels underneath, which, at acute angles of various degrees, permeate the corium, after having partially ramified underneath it; then subdividing, so as thus to secure, as far as the requisite tenuity of the structure will allow, the regularity of the circulation, and the accurate fulfilment of those other functions, which are made to be depended upon it." 161.

Mr. Chevalier is not prepared to state, from any calculation, how large a proportion of the blood may be continually flowing over the cutaneous surface. It must, however, be very considerable. Here Mr. Chevalier hazards a conjecture respecting the use of the rete mucosum, or interior epidermis, as he calls it, which is most probably original.

"What if I should consider this interior substance, so universally found under its more firm and incorruptible defender, as constituting one wide and diffused perspiratory gland, supplied by the vascular texture I have described, and being the medium of conveyance from it of that subtle fluid to the cuticle, which then exhales through its velamina, in every degree of gradation from the tranquil and invisible vapour of perfect health and ease, to the profuse and colliquative sweat of a languishing hectic, or the third stage of a fit of ague, or the clammy and panic-striking damp of the agonies of death? How else is it that our injections can penetrate no farther, when this incessant process never ends but with the end of life itself?" 165.

Of the papillæ of the skin, we have already taken some notice. Mr. Plumbe denies their existence altogether, "except in those parts of the body in which the sense of taste and touch reside," as he has never been able to discover them by the aid of the best glasses. Mr. Chevalier is of a different opinion.

"The papillæ seem to have formerly attracted the greatest share of attention; for the more obvious papillæ of the tongue, which at its tip presents one of the most perfect organs of touch, so far, and perhaps so far only, as the delicateness of tact respecting surfaces is concerned, and the larger papillæ behind, led anatomists, naturally enough, to notice the resemblance of structure in those

parts of the skin which present elongated villi after ordinary injection: but the assumption of their general existence throughout the whole surface is amply supported, not only by sensations but by facts, which occasionally reveal them in a state of morbid growth, from the most minute which are observable, to what may be called, comparatively speaking, an enormous size. (See the plate.) Much that has been written and delineated, however, respecting them, is very confused, one might almost say imaginary, or perhaps has arisen from optical deception, in examinations with incorrect glasses. They appear to arise from filaments of the cutaneous nerves, which permeate the corium from within, in the same manner as the blood-vessels, and then form, most probably in close combination with them, an essential ingredient in the villous structure of the surface. Though so minute as to be only with difficulty distinguishable in a natural state, yet from their enlargement in disease, and from the analogy of their structure with that of larger animals, I believe they have generally, if not universally, a conical form; that each has an artery appropriated to its own nutrition, which accompanies it to the termination of its point in the epidermis interior." 171.

Between these recent professed writers on dermology we cannot presume to decide. Almost all the foreign writers, from Malpighi to Gaultier, are in favour of Mr. Chevalier's opinion; and when we consider that the sense of "touch" is possessed by every part of the skin, though not in all parts so exquisitely as in the tongue and fingers' ends, we think that analogy is in favour of the existence of the papillary structure generally.

Pores. When the epidermis and rete mucosum are taken off, innumerable foramina, of various characters, are seen in the corion, and have been usually considered as giving outlet to the perspiration. This office Mr. Chevalier questions, of course, as he has viewed that important function under a different mode of effectuation.

"The orifices, called pores, are chiefly distinguishable in the corium, and are of three kinds. First, the residences of the bulbs of the hairs; secondly, those of the capilluli, or down, as it is commonly called; but which is, in reality, a congeries of very minute hairs, possessing similar, though not identical, characters and offices; and, lastly, those of the sebaceous glands. Here and there the places of transit of vessels and nerves make their appearance; but these, in number and amount, are very few compared to the rest, and are readily distinguished by the order, or, perhaps, I should rather say, by the uncertainty, of their arrangement.

"The orifices indicative of the situations of the sebaceous glands are not always permanent in the corium when dried; neither are those certainly so of the minuter hairs, constituting the pubescence. Those of the larger hairs, like those of quadrupeds,

remain, and are easily recognizable after the process of tanning. But should we look to any, or to all of these, for an account of the ordinary, or extraordinary perspiration, they could not explain it." 181.

Mr. Chevalier next draws the attention of his hearers and readers to the sebaceous glands, as they appear "to be first, in order of function, in the growth and distinction of the maturing fœtus." Toward the period of parturition these glands are more numerous than after birth, and in our author's opinion, the great utility of these glands, during utero-gestation, consists in their secretion of a clammy and somewhat unctuous substance repulsive of water, and which secures the cuticular covering of the fœtus against the effects of long maceration in the liquor amnii. Of these sebaceous glands Mr. Chevalier avers that there are two sets—one, those well known and situated beneath the second epidermis (rete mucosum)—the other (not before detected) very minute, and lying between the rete mucosum and cuticle to which they appear firmly attached.

"I found these on examining the inner surface of some cuticle which had been macerated for more than six weeks, and from which the interior epidermis, having been broken down by putrefaction, was readily washed or rubbed off. These glands remained behind, and are clearly visible in the preparations I have made; entirely separate and distinct from the bulbs, or roots, of the capilluli." 184.

That these glands have a similar function to that of the deeper seated set, Mr. Chevalier is further convinced by a remarkable case of a young lady who consulted him some years ago, and in whom there were countless numbers of them in a diseased state about the left arm, breast, and back. They were constantly turgid with the sebaceous secretion, and were productive of great irritation. The younger Mr. Chevalier has counted 140 of these exterior glands in a quarter of a square inch, which would make them amount to nearly 120 millions on the whole surface of the body.

"The *deeper seated* set, as I have observed, reside behind the inner Epidermis, cherished, supplied, and influenced by the reticular and villous texture of the blood-vessels and nerves, and attached to the coriaceous part of the integument underneath them. They have sometimes been called miliary glands; their minuteness and rotundity giving them, as was thought, a resemblance to grains of millet-seed. It is better to denominate them from their office in the animal economy, and to preserve the term sebaceous, or, as I have called them, ceraceous, as more indicative of the nature of their secretion. Not, however, that it is either suetty, or readily inflammable; for the matter they supply is of their own distinct production and character; but in several of its uses and proper-

ties it bears an analogy to those, which we frequently derive from fatty or waxy matter, in the ordinary businesses of life. It repels aqueous fluids, so as to call for the employment of saponaceous substances, which incorporate with both, readily to cleanse the surface which it overspreads. To a certain degree it prevents the dangers of friction, without diminishing sensibility. It is curious to observe how the tip of the nose of the sucking infant, its lips, both within and without, and the contiguous parts of the chin and cheek, are studded with these glands, to enable it to nestle, as it were, with impunity, on its mother's breast."

In after life, the smoothness, softness, and polish of the skin, and its ability to bear exposure, depend greatly on the regularity of secretion in these glands.

Mr. Plumbe denies the existence, or at all events, the functions of the sebaceous glands. Instead of glands secreting an oleaginous or lubricating fluid, he describes a follicular apparatus.

"The cutis," says Mr. Plumbe, "on the vascular energies of which the production and nourishment of the cuticle depends, besides its more obvious and general offices as a covering to other parts, and as the structure effecting the separation of the perspirable matter from the mass of blood, gives in different parts of the body a seat to a most important structural arrangement, on the disorder of which some of the most obstinate cutaneous affections are found to depend:—the sebaceous follicles. These follicles are minute thimble-like depressions in the substance of the cutis. The larger kind are most numerously distributed over parts much exposed, and where flexures of the skin are formed; the secretion poured out in the former instance, probably forming a defence to the cuticle, under exposure to heat; and in the latter, operating to prevent the consequences of attrition. They are most easily distinguishable about the nose and mouth in men, as well as in females; but in the latter, they are also often seen in great numbers on the neck and upper parts of the chest: their secretion, which is entirely supplied by the vessels of the cutis, gives an agreeably smooth and glossy appearance to the skin of these parts, where their dimensions and number are not very considerable; but where the reverse is the case, the secretion at their orifices becomes discoloured, forming so many minute black spots, which much disfigures these parts, and gives them a dingy, unhealthy appearance." 4.

Mr. Plumbe thinks that Mr. Chevalier has been deceived respecting these glands—and that the little white pearly prominences described by him as glands, and illustrated by a preparation deposited in the College Museum, are no other than "concretions of sabaceous matter on the mouths of the follicles, retained in that situation by the cuticle." On maceration, he observes, the cuticle peels off, leaving the concretions undisturbed. In the preparation alluded to, many of these specks

are already detached and floating loose in the spirit—an occurrence which, he thinks, would not have so soon taken place, had they been such as Mr. Chevalier describes them. Mr. Plumbe's apparatus and opinions have been anticipated by Chaussier and others. This gentleman distinctly describes the sebaceous follicles. "Enfin, le derme offre dans toute son etendue et dans toutes les areoles de son tissu propre un grand nombre de follicules destinées à secreter une humeur huileuse qui entretient la souplesse de la peau."*

Capilli and Capilluli. Mr. Chevalier differs from the best dermologists in respect to the seat of the *bulbs* of the hair.—He places them on the exterior surface of the corium, in which they are embedded, and from whence the hairs spring out obliquely through the rete muscosum and epidermis, the latter embracing them very firmly as they emerge from the surface. Mr. Plumbe, and the continental dermologists are all agreed that the seat of the bulbs is below the inner surface of the cutis—in fact, in the cellular membrane. "Il (le bulbe) est situé presques toujours dans le tissu cellulaire sous-cutané et quelquefois *plus superficiellement* dans les areoles qui se voient à la *face profonde* du chorion dans l'epaisseur duquel, au premier coup d'œil, il parait alors implanté." *Villermé.*

In man the hairs are tubular, the tubes being intersected by partitions, resembling the sap-vessels in plants. Whether the hairs transmit any secretion, Mr. C. thinks is worthy of inquiry.

Corium, or Dermis. This is the firm stratum of the skin which forms the basis, on which the other parts are, as it were, spread out. Its structure appears chiefly made up of a fibrous substance, the threads of which are interwoven with each other in various directions, so as to give a compactness that remains long after death. It is pierced by innumerable holes for the transmission of the hairs, the nerves, and the blood-vessels; but has very few blood-vessels of its own—only those to nourish its proper substance. Immediately underneath it, the cutaneous arteries are distributed in an arborescent form, anastomising freely, so as to secure the regular supply of the reticular and villous texture—their ultimate destination. "Here they are retained by the cellular membrane, into which the structure of the corium itself seems gradually to subside;—so that it is sometimes a nice point to distinguish where one absolutely ends, and the other begins." *Chev.*

* See vol. 8 of Dict. des Sciences Med. Art. *derme.*

We trust that this slight anatomical sketch of the different structures composing the skin, will not be unacceptable to our readers, as a reference when the subject is under discussion. It has been drawn from sources which are not at the command of even the generality of our readers, and we have taken some pains to compress the known and ascertained facts into as small a space as possible.

Mr. Chevalier's work will not come again under notice in this article, and that respectable surgeon is, himself gone to the "house appointed for all living," since its publication. This last circumstance must be our apology for not indulging in any criticisms on the work of one who is no longer able to answer for himself. We do not wish to be classed among those hyenas who tear open the graves of their victims, to glut on the mangled and quivering members! Quiescunt in pace. But even were Mr. Chevalier alive, we should have but few strictures to make on his work. Its greatest and almost only fault is excessive dilution of the matter by a most extraordinary and unnecessary redundancy of words, metaphors, and allusions. We will give a single example, which is indeed a fac simile of the whole. Thus, for the simple expression—suppression of perspiration, we have the tiresome periphrasis—"suppression *of* the actions *of* the organ *of* perspiration." P. 199. Still, as we said before, the matter itself is unobjectionable when freed from the prodigious load of words in which it is buried.

We have said little or nothing on the functions of perspiration and absorption. It is evident that no separate or distinct apparatus can be discovered for either process; and therefore, it follows, that both functions are performed by the same vessels (as far as we know)—that is, by the vascular system of vessels spread over the outer surface of the corion. The *modus* is a mere matter of conjecture. The fluid thrown off by the cutaneous vessels is of such various appearance and qualities, that no rational thinker can view it in any other light than as a *secretion;* and therefore, we think Mr. Chevalier perfectly justified in characterising the skin as an immense gland, destined for a most important secretion—and uniting in itself the other functions of feeling and absorption. In this triple capacity it exercises a most powerful influence on the other and interior functions of the body—forming the centre of a train of sympathies the most complicated and wonderful—and becoming in its turn the *subject* of reaction from within, as will be abundantly seen in the host of cutaneous diseases to which we are next to turn our attention.

We now come to the pathology of the skin, and more parti-

cularly to Mr. Plumbe's work. This gentleman has for some time paid attention to cutaneous diseases, and is well known as the author of a work on porrigo, already noticed in this journal. In the *arrangement* of his subjects, Mr. Plumbe has endeavoured to obviate inconveniences that have been often complained of in classifications founded merely on local character, although he is conscious that it would be nearly impossible to construct a classification, that would completely comprehend both the local characters and constitutional causes under precise definitions. Still he thinks that, in a large proportion of the divisions he has instituted, a step of some utility will be gained. The study of cutaneous diseases he considers as yet in its infancy; and he will not admit that the inquiries and researches of Dr. Willan among the writings of ancient authors have elicited any useful information —no great encouragement to future bookworms! These are nearly the sentiments of Alibert. "J'entre," (says that illustrious but somewhat vain dermologist) "dans une carriére presque deserte, où peu d'hommes ont penetré avant moi; où aucun travail anterieur ne m'a servi de guide; où tout est nouveau pour l'observation; où tout est problème pour la pensée." A little farther on M. Alibert affirms that "the works which we possess (on cutaneous diseases) offer nothing but a mass of confused ideas, of dangerous or unnecessary theories." The picture which M. Alibert draws of the endless varieties of cutaneous defædations is enough to frighten most men from the attempt to study them. "Quelle inconcevable variété dans les degradations de tont geure dont nos tegumens sont susceptible!" Mr. Plumbe has endeavoured 'to steer as widely as possible of those numerous divisions into species where slight variations only exist, and those endless distinctions without real differences, which have been made by this author (Dr. Willan) as being calculated to discourage the student rather than promote the knowledge of the subject."

"Abbreviation of remark, so far as it could be observed without the sacrifice of any important consideration, and an arrangement of the engravings calculated to convey clear ideas of the different diseases in one plate, have been had recourse to, with a view to escape a serious obstacle to the propagation of the knowledge of these subjects, among persons whose pecuniary means of obtaining information are at all limited." vii

M. Alibert, in the third section of his "Discours Preliminaire," takes a philosophical view of those causes which contribute to the development of cutaneous diseases:—And as this magnificent and expensive work is in the hands of very few on this side of the channel, we deem it useful to set before our readers the prominent features of the said section, more

especially as etiology, *in a general way*, is scarcely touched upon by Willan, Bateman, or Plumbe. Alibert arranges his observations on this subject under eleven heads, and these we shall follow seriatim.

M. Alibert prefaces this section with some interesting remarks on the *modifications* which age, sex, temperament, seasons, and climates produce on cutaneous diseases. The eruptions attending dentition in infancy, and the pruritus of senescence are examples of the first of these modifying causes.—Sex has considerable influence. M. Alibert lately saw a lady who suddenly and prematurely weaned her child. Her upper and lower extremities became quickly covered with a crustaceous eruption. She applied the child again to the breast, and the eruption quickly disappeared. The influence of seasons and atmospheric vicissitudes on the skin are notorious—and that of climate, in an extended sense of the word, will be forcibly called to mind by the plica of Poland—the yaws of America or Africa—the elephantiasis of India—the lepra of Egypt—the pellagra of Lombardy—the dartre of France, and (without meaning any national reflection) the itch of Scotland. But we now come to the more direct causes of cutaneous diseases.

1. M. Alibert has properly placed at the head of this long list, those derangements of the digestive organs produced by unwholesome or improper food and drink. The Hospital of St. Louis, is perhaps, half-peopled from this cause—or rather chain of causes.

2. Exposure to atmospheric influence is the next agent laid down by our author, as among the most active in the production of cutaneous maladies. Cold, moisture, in short, vicissitudes, check the transpiration, and this secretion accumulating in the conduits, excites a host of herpetic and erythematous eruptions.

3. *Want of Exercise.*—M. Alibert has found this a prolific source of cutaneous defædations, among the now almost innumerable ramifications of the sedentary classes of society—high and low. Men of letters, savans, philosophers, mechanics—all suffer from this cause. The vascular system of the skin becomes enfeebled from want of air and muscular exertion—and eruptions of various kinds follow as the natural consequence.

4. *Extremes Approximate.*—Prolonged watching, fatigue, and want of rest, give rise to ulcers, and dartrous affections of a very indomitable kind.

5. *Want of Cleanliness.*—On this point we need not comment. Its influence is extensive and predominant.

6. M. Alibert has seen many cutaneous diseases clearly resulting from particular trades and professions—which have escaped the observation of Ramazini.

7. *Contagion.*—This is an abundant source of the diseases in question, but, as in other circumstances, it is veiled in great obscurity. Every cutaneous malady has, as it were, its own peculiar channel or mode of communication. He has made numerous experiments at the St. Louis on the subject of contagion. Thus, while variola and vaccina may be conveyed by the introduction of matter into the absorbents, the same cannot be done with the itch, which he has, in vain, tried to produce by inoculation. The facility of transmission, in cutaneous maladies, is greatly influenced by the physiologic condition of the skin to be acted on. Thus in a sound and vigorous state, the cutaneous surface will catch a disorder from another far more readily than if in an opposite condition. Extensive experience has also taught him that the more superficial eruptive diseases—those which are almost entirely confined, both as to cause and effect, to the skin itself, are far more contagious or transferrible, than those connected with, or dependent on deranged condition of the internal organs. It is fortunate also that the most inveterate cutaneous diseases are least contagious. Even tinea, he avers, is seldom communicated by simple contact, unless there be various circumstances to favour its transmission.

8. *Insects* take their share in the production of the class of affections under review. The itch is attributed by M. Alibert to the acarus. The dracunculus and other depredators are familiar examples.

9. *Moral Affections* of a depressing nature are powerfully conducive to cutaneous diseases. One cause why animals are less subject to these disorders than man, may be sought in their comparative freedom from mental emotions and conflicting passions. Our author has given a drawing of a servant, who, on seeing his master dragged to the scaffold, became almost instantly covered with a furfuraceous eruption; and he has seen an instance of a woman become quickly overspread with a papular eruption merely from the receipt of a piece of bad news.

10. *Manners and Customs.*—The erudite researches of Wil-

lan have shown us how great an immunity the ancients enjoyed from cutaneous defædations. Homer scarcely mentions such a thing, except in the person of some dirty beggar. Herodotus, Thucydides, Diodorus Siculus, are equally silent, excepting some straggling traditionary instances to which they allude, as punishments on the individuals. The early Romans prided themselves on their freedom from the deformities of the skin. But luxury increased—the martial and gymnastic exercises were neglected—indulgences in idleness, debauchery, and drunkenness began to prevail—and *then* cutaneous complaints became common. Neither the Germans, Gauls, nor Britons, were affected with these diseases till after their commerce with the Saracens. It is melancholy to reflect that two of our greatest scourges, Variola and Syphilis, owe their introduction into Europe, most probably, to political or commercial speculations.

11. Last, though perhaps not least, is hereditary disposition. Numerous facts indisputably prove that families become degraded or at least degenerated, by the mournful inheritance of diseases or their germs, transmitted from generation to generation. Our author has seen numerous instances of the strange modifications of cutaneous diseases produced by descent. He saw a woman, who, in pregnancy, suffered severely from confluent small-pox. Her infant came into the world covered with a scaly eruption of most hideous appearance. In another case, when the male parent was excessively afflicted with gout, the children were born with severe herpetic eruptions.* It not unfrequently happens that cutaneous diseases are transmitted from parent to progeny with symptoms precisely similar. M. Alibert saw the child of a parent, with cancer of the lip, affected with a similar disease. The two men lately exhibited all over Europe, with scaly skins, were descended from parents whose skins were also scaly. He concludes with the belief that there is no class of disease more transmissible, or, in other words, more hereditary, than those now under consideration.

We have dwelt the longer on this etiological sketch, the result of unequalled experience, because it will show that, with a few exceptions, the causes of cutaneous diseases are the same as of most other diseases, and consequently that the great majority of them are dependent on, or connected with some derangement of health—especially of the digestive organs—and consequently to be treated under that impression.

* Dr. Parry, in his inestimable work on Pathology, has given numerous examples of this kind. By the by, is the younger Dr. Parry ever to bring out the long-expected second volume of his father's work?

Mr. Plumbe has thrown his arrangement into five sections, as follow:—

Sec. I. "*Diseases which obtain their distinguishing characteristics from local peculiarities of the skin;*"—containing ACNE and its varieties—SYCOSIS—PORRIGO, SCULULATA—FURFURANS—and LUPINOSA.

Sec. II. "*Diseases dependent on debilitated and deranged States of System, and consequent diminishing Tone of the Vessels of the Cutis*"—embracing PURPURA and its varieties—PEMPHIGUS and POMPHOLYX—ECTHYMA and RUPIA.

Sec. III. "*On Diseases exerting a probably salutary influence on the System, originally produced by, and usually symptomatic of, deranged digestive Organs, and characterized by active Inflammation;*"—comprehending PORRIGO FAVOSA and LARVALIS—STROPHULUS LICHEN—LICHEN TROPICUS—PRURIGO—URTICARIA—HERPES—THRUSH—BOILS.

Sec. IV. "*On Diseases marked by chronic inflammatory Action of the Vessels producing the Cuticle;*"—as LEPRA and its varieties—PSORIASIS—PITYRIASIS—PELLAGRA—ICTHYOSIS—WARTS.

Sec. V. This is a convenient class in all systems of nosology. It is a kind of pariar or outcast class, admitting all those diseases which can find admittance no where else; viz.—"*Diseases of a mixed character, &c.*"—including IMPETIGO—SCABIES—ECZEMA—ERYSIPELAS—ELEPHANTIASIS—ERYTHEMA and ROSEOLA—VENEREAL ERUPTIONS.

Such is the classification or arrangement of the latest writer on dermology—and we have little doubt that his cotemporary dermological practitioners and critics will be able to raise as many objections to it, as he has done to the arrangements of others. Considering it nearly as difficult, however, to arrange and portray the ever-varying eruptions on the skin as the ever-varying clouds in the sky (both of which tasks have been undertaken) we do not set a very high value on purely dermological criticisms—and therefore, shall take little notice of them, in this analytical sketch.*

* We have received some severe strictures on Mr. Plumbe's work from more than one or two anonymous sources. But of these we shall not avail our-

As it would be obviously improper to go through a regular analysis of an elementary compilation, like that of Mr. Plumbe's, we shall only take a single section, and that the first, containing among other diseases, tinea capitis, as an example of our author's manner and matter, which will enable our readers to form some judgment of the whole work.

SECTION THE FIRST.

1. *Acne.* It will be seen that Mr. Plumbe commences with *tubercular* eruptions, the subject of which is taken up at page 72 (3d edition) of Bateman, and by a curious coincidence, at page 72 of Alibert. Four varieties of ACNE are described by Bateman, (simplex, punctata, indurata, and rosacea) the necessity for which division is questioned by Mr. Plumbe, who therefore commences the work of reformation, or at least of simplification, at the very threshold. The descriptions are nearly the same in both authors, and need not be here repeated. Mr. Plumbe considers the eruption as arising originally from obstruction of the sebaceous matter in its passage to the surface of the skin, by which a considerable degree of hardening of that substance is produced, as well as accumulation. The simple appearance of such spots on the face should not, he thinks, be considered as a disease, or as deviation from health—"the only desirable change which can be effected, where they exist to an unpleasant extent, is that which frequent ablution and moderate friction can produce." The plate which Alibert gives of this eruption, under the title "*Dartre pustuleuse Miliaire*" on the face of a young lady of 18, would be considered by most young ladies as a very formidable disease indeed. Alibert's patient, however, was

selves, as most of them bear the impress of the detestable *Odium Medicum*, the disgrace of our profession. Mr. Plumbe has been censured for his expressed contempt of what the ancient writers have said and done respecting cutaneous diseases. He is not singular in this. The master Dermologist of the age, M. Alibert, has expressed himself in still stronger terms. Speaking of Tinea, M. Alibert observes:—

"Que trouve-t-on dans les auteurs, touchant la nature et le caractere specifique des Teignes?—Des renseignemens incertains, des dissertations vains, des détails vagues, toujours insuffisans. Il semble que les Anciens aient ecrit au hazard sur cet exantheme aussi repoussant qu' opiniâtre. J'elague de cet ouvrage les discussions futiles aux quelles se sont livrés mes predecesseurs. Je transcris ce que J'ai observé, m'inquietant peu de ce qu'on a dit avant moi. *Quand on voit de si pres la Nature, quel besoin a-t-on de recourir aux travaux des Grecs et des Arabs?—Tout etalage d'erudition ne seroit qu'un vain jeu de l'esprit, sans avantage pour la science.*"

This is a home thrust to those who trust more to what they read in the Ancients, than what they see with their own eyes. What is the use of eyes to these last?

vigorous and healthy, though much annoyed by the itching of the eruption. But under circumstances of actual and long-continued follicular obstruction, the complaint becomes troublesome, and the practitioner is called in. "The immediate exciting cause of this inflammation is usually found to depend on some accidental disorder of the primæ viæ;" but, "independent of the disposition to this affection which the habit of living may generate, some individuals are peculiarly disposed to it from *original formation of skin*, and hence has arisen the idea of its *hereditary* character." We think this is rather eluding than meeting the question. We would ask Mr. Plumbe, whence the *original formation of skin?* Certainly from an hereditary source. In the same way pulmonary consumption has been attempted to be shown as having no hereditary tendency. It is true, that tubercles in the lungs, or disposition to them, which amounts to pretty nearly the same thing, are transmitted from parent to child, and these tubercles sooner or later, in general, end in phthisis. But because children are *never* born with hectic fever and purulent expectoration, it is gravely and logically inferred, that phthisis is *never* hereditary. We see features, figure, and other peculiarities often transmitted by descent—and why not certain peculiarities of internal organization? We know of no just cause why they should not—indeed, we are convinced that they are transmitted, occasionally.

"When disorder of the digestive organs has been the immediate exciting cause of acne, the symptoms of the first affection are alleviated, and there is no doubt that more formidable mischief is sometimes prevented by its occurrence: in the treatment of the mild and transient kind described, therefore, the state of these organs and the general condition of the system ought to occupy the chief attention: not so much, however, from the fear of doing mischief by sedative applications in repelling the eruption, but as leading to the most direct remedial measure. Repellents, as they have been termed, seldom have any effect in preventing suppuration, and this ought to be considered the most desirable course it should take. Frequent bathing the parts with warm water, and gentle friction with the mildest kind of soap, constitutes by far the best kind of local application, its effect being at once to allay irritation, and promote suppuration, and at the same time to remove any accumulation in the follicles of the part as yet uninflamed." 23.

Mr. Plumbe avers, that, except in the old-established and indurated state of this affection, the use of stimulants, as practised by the ancients and approved of by Bateman, is obviously improper, because in opposition to the first principles of surgery. Stimulants, he says, only add to the irritation and ex-

tent of the disease, and consequently to its duration, "while the plan which conducts the tubercles to a safe and healthy suppuration is least painful to the patient, and free from danger of the supposed prejudicial effects of sedatives."

Mr. Plumbe has no doubt that blisters, as recommended by Bateman, might put an immediate stop to the disease—the vesication clearing the obstructed follicles—while the inflammation is checked by the counter-irritation in the neighbourhood. "But it is a remedy unnecessarily severe, and exceedingly inconvenient."

"The foregoing remarks apply more particularly to the states and consequences of obstruction of the sebaceous follicles, denominated acne simplex and acne punctata. When the disease occurs more extensively, and habitual disorder of the digestive organs, or scrofulous diathesis exist, a slow and unhealthy suppuration takes place, spreading from the originally inflamed follicle, and involving to a considerable extent those in the neighbourhood, producing, instead of a remote pustule, a considerable, though slowly formed, collection of matter. The latter, instead of finding its way quickly to the surface, accumulates and disorders the substance of the cutis to a great extent. Its course and extent is marked during the more active state of the inflammation by a florid looking and very irregularly formed, rather prominent, tubercle, exceedingly tender to the touch, and in some one or two points soft: still the superincumbent skin is not ruptured, and in the course of a short time it assumes a dark blue colour. In this state it sometimes comes under the notice of the surgeon, when the existence of matter being ascertained, a lancet is thrust into it, and the contents discharged, leaving for some time an unhealthy livid edge to the orifice, which slowly heals, and, in most instances, leaves a mark of some duration on the part. If neglected beyond a certain extent, however, and this course is not taken, the matter is either absorbed in the most sluggish and protracted manner, or a small portion remains to find its way through the skin, leaving a more minute sore, which soon dries up; a blue discoloration of the spot sometimes remaining for months." 27.

In the treatment of this affection Mr. P. laments the deficiency of attention to common surgical principles. The general application of stimulants must be improper, while any vestige of inflammation exists. On the contrary, poultices and fomentations are necessary to soothe irritation, and promote suppuration. "If any tubercle should be found assuming the blue colour without signs of matter coming forward, it should be freely punctured," the matter evacuated, and irritation allayed, then stimulants may be proper. The oxymurias hydrargyri dissolved in proof spirit, in the proportion of five grains to eight ounces, is preferred by Mr. P. to other lotions. Mercurial ointment, he thinks, would be still better, but it is

an unpleasant application to such a part. Alteratives and tonics internally are recommended, as there is generally some constitutional derangement.

"The chronic inflammatory redness and enlargement of the nose, which constitutes the state of acne rosacea, the affection under consideration, is always the result of repeated attacks, or of long continuation of the obstructed state of the follicles, the direct exciting cause being an overloaded state of the stomach, and frequent excessive and general excitement of the digestive organs. There seems to be a satisfactory explanation of the disease being first found to attack the nose, in the fact, that the follicles are here very thickly distributed, while it is more exposed to the chilling effects of cold, and consequently more frequently to the effects of reaction: constant checks being thereby afforded to the healthy progress of suppuration, as well as means of increasing and extending the inflammation." 33.

We shall pass over sycosis, as our author considers it neither more nor less than acne, or follicular obstruction occurring in parts covered with hair, and consequently assuming a more obstinate and formidable character. Where the hair can be extracted without pain, this, he thinks, should be a preliminary step.

2. *Porrigo.* Our author directs his principal attention to a consideration of p. scutulata, or common ring-worm of the scalp, which he affirms to be only the commencement of that disease, which, under circumstances of great neglect, answers to the description of porrigo furfurans and p. lupinosa. Having written professedly on the subject of ring-worm of the scalp, our author is much more copious, in proportion, on this than on most other individual topics. And as it is an important disease, we shall make it the conclusion of this first dermological article.

Mr. Plumbe's description differs but in one item from that of Willan. His observations altogether are very much more full than those of Bateman. As Willan is in the hands of comparatively few, we shall give the following descriptive sketch from Mr. Plumbe.

"The symptom by which this disease is usually first discovered, is the falling off of the hair of the part. The attention being attracted by this occurrence, the scalp appears, on examination, to have assumed a somewhat scurfy and slightly reddened appearance. The hair remaining on the diseased part, is thin and irregularly scattered over it, the greater portion appearing to have been removed by the roots, while some have been broken off near to the scalp, the roots of which still retain their situation. Those which remain apparently growing on the part, will be found to drop off

on friction; or to have, on being pulled, scarce any hold on the scalp.

"In the majority of cases, at their first commencement, these will be the only appearances noticed. The existence of the minute straw-coloured pustules, denominated achores, does not appear necessary to constitute the disease, as they are not seen for a short time later, and not till after some degree of itching and irritation of the part has been felt.

"The itching and irritation commencing simultaneously with the formation of pustules, the child who is the subject of the disease soon ruptures a few of them, and spreading, by the frequently repeated application of the nails to the spot, their contents over the adjacent parts of the scalp, extends the mischief with great rapidity upon it; the same destruction of the hair, and subsequent pustulation, marking its progress.

"When pustules are noticed, they are uniformly found with hairs growing through them; and if the disease has existed for a considerable length of time, and destroyed the greater part of the hair of the part, such pustules are found proportionately reduced in number; but still surrounding the few straggling hairs which remain; each single minute pustule appearing to be dependant on the hair in its centre.

"If the hair, as sometimes happens, be completely eradicated from the spot where the disease first appears, the skin assumes an apparently healthy character; the disease, as regards this particular spot, may be said to have exhausted itself.

"In traversing the other parts of the scalp, however, the power of infection being kept up by the secretion of the pustules of such parts, till the new hair again appears in the original situation of the disease, a recurrence of the pustules takes place here, and the same destruction of the new hair is observed, as of the old." 44.

The disease, when once formed, our author avers, spreads only to a small extent by the application of the infectious matter, *and not from the mere communication of the specific action of the vessels of the part to those adjoining.* This being the case, the importance of cleanliness becomes obvious enough—and indeed Mr. Plumbe appears to attach far more virtue to this alone, than to any medicinal application whatever, cleanliness being neglected. Mr. P. does not believe in the statements handed down to us respecting the effect of ring-worm in altering the colour and strength of the hair—unless ulcerations have been allowed to form and affect the parts whence the hair is secreted. These effects seldom are seen in decent society. When the secretion accumulates and scabs are formed, it is then denominated *scald-head.* Willan observes, that the complete extirpation of the hair is followed by a return of the natural colour and appearance of the scalp. "A remark," says Mr. Plumbe, "which appears to have been made without exciting the suspicion that the hair, while it remained, had any

share in keeping up the disease." The circumstance of there being a hair uniformly growing in the centre of the pustules appears to have led Dr. Underwood long ago to suppose that tinea commences in the roots of the hair. Hence probably his practice of the pitch cap for eradicating the hair. This practice, Mr. Plumbe thinks, was founded on a just principle, though too cruel in its effects. Mr. Plumbe is rather tiresome when he gets on this subject of the hair. He seems so enamoured of it that it is with difficulty he leaves it. This is the case, however, with every writer who has got a hobby. The following extract contains the pith of our author's favourite pathology.

"The disease may be defined to be inflammation of a specific character, affecting the solid structure of the cutis. It will be recollected, that pustules only occur where hair exists, and that each pustule has usually one in its centre: and bearing in mind what has been already stated, as to the probable influence of the hair on the scalp, where the cutis is actively inflamed, we may be warranted in the conclusion, that the specific irritation of the disease obtains an accession of strength from the local influence of the hair, where it penetrates the scalp; and that the formation of a pustule is the consequence of such accession." 65.

The porrigo scutulata appears to be the *tinea granulata* of Alibert, who has given a fine plate of this species.

Treatment. The first step which Mr. Plumbe takes is to remove any hair remaining on the part, and which comes away without pain to the patient.

"This precaution is necessary, whether pustules may have formed in great numbers or not, and not only should such gentle force be used as is consistent with ease to the patient, in trying the hair of the diseased part, but that which is apparently healthy, surrounding the margin, should be submitted to the same test; for it not unfrequently happens, that the hair will easily separate a short distance from this, without pain, and lead to the discovery of the mischief to a greater extent than was first suspected. It must be taken for granted, that those hairs which will separate with a slight degree of force have lost the means of support and nourishment, either as the consequence of the formation of a pustule around them, or from the influence of the irritation of the disease, on its secreting structure which has been explained; and that their remaining sticking in the scalp can only be productive of further irritation on the part." 71.

This is done, not by the indiscriminate eradication of the pitch-cap, but by a pair of small forceps. Shaving the part, though necessary in all cases after the loose hair has been removed, is no effectual substitute for the eradication, in Mr. Plumbe's opinion. The next step, and preliminary to any

medicinal application, is to discharge the contents of as many of the pustules as possible, by pinching up the skin between the finger and thumb, and carefully washing away what is thus forced out, by warm soap and water. This done, some astringent application, possessing the power of taking from the secretion its contagious quality, and at the same time of constringing the vessels from which it flows, and lessening its quantity, may be made use of.

"A solution of the sulphate of copper has been employed in some cases for this purpose: I believe the object to be more completely accomplished, however, by rubbing this preparation, in a finely powdered state, on the part, and then washing it off." 73.

Some sedative application is necessary to keep down any temporary inflammation occasioned by drawing out the hairs and shaving the parts.

"A careful examination should be instituted every morning, and if any pustules appear, they should be at once removed, and the sulphate of copper applied, as at first, to the part. After two or three repetitions of this application, no fresh appearance of pustule takes place, and the circle of the disease is marked by small thin scabs of a darkish colour, and the same characteristics in other respects, as the common exudation from abraded surfaces to the cutis. These scabs separate in a few days, bringing with them a few of the remaining hairs which have separated, and leaving a shining red and irregular surface, which gradually loses its inflammatory character, having now and then a little scurf forming on it, till the new hair begins to appear." 74.

When a great number of pustules has been formed, the effects on the scalp are such that we need scarcely look for strong and healthy hair in a shorter period than six weeks or two months. At the end of three months it usually attains its original strength.

It is to be observed, that the treatment above described, as applicable to simple ring-worm, requires some modification in those long-established cases, where great accumulation of scabs, portions of ulcerated surface, and an irritable state of the vessels exist. Fomentations, poultices, and "pressure and cold applications combined," have rarely failed, in our author's hands, to finally subdue the disease. The foregoing description of the local treatment of porrigo scutulata comprehends every thing on which our author is able to speak from experience. He condemns the use of greasy applications, as he has frequently seen the disease spread rather than subside under them. In cases of simple ring-worm, as it is usually seen in the middle and higher classes of society, where cleanliness is observed, he thinks internal remedies can rarely be necessary. But in severe cases, such as are alluded to

above, the occurrence of constitutional irritation will demand constitutional remedies. Mr. Plumbe's remarks on the porrigo furfurans and lupinosa require no notice here.

"On the subject of the infectious properties of Porrigo, it is necessary to state that the advanced and neglected conditions of the disease are not possessed of this property to any considerable extent; and indeed I am not satisfied that it does not, in the course of time, lose the power of infection altogether; its specific character seeming to subside into the mere effects of local irritation upon diseased parts." 93.

Here we must close our article. Not making criticism our trade, we shall say very little on the merits or demerits of Mr. Plumbe's work. It certainly is not without some originality, and we think he has corrected some erroneous notions of more celebrated authors than himself. But, from the looseness of the style and the size of the type, he has spread the matter of his work over at least double the space which it might have occupied, had Mr. Plumbe been practised in literary composition. In the next edition (and we venture to say it will go through several) we advise him to remodel the language and style, in toto, studying terseness instead of diffusion, by which means he may nearly double the matter without adding to the size or price.

IV.

Essays on various Subjects of Medical Science. By DAVID HOSACK, M.D. F.R.S. &c. &c. Two Volumes, 8vo. New York, 1824.

Of the various papers published in these two volumes, many, we might say most, have already appeared before the public, either in this country or America. Dr. Hosack has been rather remiss sometimes in not indicating with precision, where and when his Essays made their first appearance, and we have not the power of supplying the deficiency. As Dr. Hosack, however, is a man whose facts are entitled to our credence, and whose opinions command our respect, we shall glance over several of the papers contained in this work, and hope that our time will not be deemed by our readers to have been unprofitably spent in the operation.

The first volume is occupied chiefly with subjects of either

a local, a temporary, or an elementary nature, which it will not suit our purpose to notice in this article. The second paper in the second volume is entitled "Observations on Fever," and contains many judicious reflections, with some appropriate criticisms on the various doctrines which have been maintained in respect to this disease. He observes that fevers, to this day, constitute the great outlets to human life, and are "almost as fatal as in the time of Sydenham." However minutely we may be acquainted with the symptoms and phenomena of fever, as well as its predisposing and exciting causes, we know very little about its *proximate cause*.

"Whence, then," says Dr. H. "has arisen the discordant, and, we may almost say, the empirical practice, that fills the pages of the best writers on fevers, and that is even to be found in the truly valuable works of Boerhaave, Cullen, Fordyce, Wilson, and others? We answer; it is in a great degree ascribable to the local views of the animal economy to which some of those writers have been limited by their own hypotheses, and which practitioners, relying upon the authority of great names, have hastily adopted." 90.

Boerhaave and Cullen, each run into a dangerous extreme; the first in respect to the humoral, and the second in respect to the nervous pathology. "The still more recent writings of Brown, Beddoes, Darwin, Girtanner, Clutterbuck, Rush, and others, have been too successful in spreading these partial views of the human structure, and consequently limited pathology of the diseases to which it is liable."

"Fever, in the opinion of the writer of these remarks, is a disease of the whole system; it appears no less in all the faculties of the mind than in all the functions of the body; it shows itself in every organ of our frame, and affects every nerve and fibre of the system; the absorbing, the circulating, and excreting systems of vessels, are all affected by it; it shows itself in all the various fluids of the body, as well as in the solids; in a word it is omnipresent; it has no one pathognomonic symptom, but is constituted by a concourse of symptoms, and these variously combined in the various forms that fever assumes, depending upon the causes whence it proceeds, and the condition of body in which it occurs. If this view of the subject be correct, it will necessarily lead the physician to more extensive principles of practice; it will lead him, at the bed-side of the patient, to pay due regard to the nervous system, the phenomena it exhibits, and the indications thence arising: but at the same time it will lead him to notice the changes which may be induced in the secretions and excretions, and the circulating mass from whence they proceed." 91.

The above is nearly the doctrine which we have maintained in this Journal since its commencement, and the longer we

live, the more we are convinced of the danger as well as error of the partial doctrines which have been so industriously circulated of late years.

Our author properly observes, that fever cannot long continue without inducing debility of the vascular as well as other parts of the system, with a corresponding increase of sensibility to impressions. The heart and arteries are then more readily acted on, even by the natural stimuli of the system.

"The heart and vessels are accordingly excited to preternatural frequency, even operated upon by the blood and other fluids of the system in their natural and healthy condition, as we see daily illustrated in the progress of all fevers, and in convalescence from fever: we contend that fever, long continued, not only wastes the power of the solids, rendering them more irritable, but by the derangement in the functions and excretions, perhaps by the action of the blood-vessels themselves upon their contents, and especially by the retention of those materials which should have been thrown out of the system as noxious, which in health are constantly ejected, the circulating fluids become changed and vitiated, and thereby become additional sources of irritation to the heart and arteries, whose susceptibility of impression, as we have just observed, is also morbidly increased. From this view of the more irritable state of the circulating system, and the vitiated condition of the fluids, we infer, that unless by some salutary power inherent in the system itself, or by some means suggested by art, the greater irritability of the whole system, and of the heart and arteries in particular, be diminished, or the morbid changes induced in the fluids they circulate, be counteracted, these causes of fever, mutually operating upon each other, must increase, and fever be continued until the vital principle itself be totally expended. How far, then, we ask, is the attention of physicians directed to these two cardinal objects, in the treatment of the advanced stage of fevers? how far is their practice calculated either to impart vigour to the system, and thereby to lessen the morbid sensibility of the nervous and moving fibre, or to counteract the septic tendency of the circulating fluids which obtains in most fevers of the continued type?" 94.

Our author is hereby led to condemn that indiscriminate and continued use of the debilitating evacuants, usually prescribed at this advanced period of fevers and febrile diseases, in as far as they are calculated to add to that waste of excitement, and that very vitiation of the fluids above referred to. These observations are deserving of attention by the younger practitioners, who are obliged to go by what they are taught, in the first years of their career.

2. *Glossitis.* A melancholy case of this disease is related by Dr. Hosack. A gentleman, Mr. Hamilton of Poughkeepsie, was exposed to great heat in driving his own carriage, and

then imprudently threw off his clothes and sat in a stream of cold air. He was soon taken ill, and three days afterwards was found by Dr. Cooper with his tongue swelled, so as to press against the roof of his mouth, and soon afterwards to protrude beyond the teeth. He could not now close his mouth, or articulate, and deglutition was attended with difficulty and distress. Not only the tongue, but the sublingual glands, and the whole neck from the jaw to the clavicles, became very much enlarged. Dr. C. proposed venesection, to which Mr. Hamilton would not submit, because he was subject to gout. Purgatives were then administered, and a blister applied. But the symptoms all increased in violence. Dr. Bard was called in, and, on examination, found a suppurating tumour under the tongue. This was opened, and a small quantity of offensive pus discharged. Some abatement of the symptoms now took place, but the relief was transient and deceitful. Drowsiness and coma soon came on, apparently occasioned by congestion of the cerebral vessels. Delirium soon supervened—his face became of a dark red colour—pulse frequent and full—respiration hurried—discharges from the mouth very offensive. Eight days had now elapsed since the commencement of the disease, but still it was deemed advisable to draw blood from a vein. Fourteen ounces were taken, and a saline cathartic administered. By these he was somewhat relieved; but in the evening all the symptoms again increased in violence.—Next morning, however, appearances were more favourable. The tongue became cleaner, and was much diminished in size, so that he could now bring his teeth together. Still the tumour was hard and unyielding, the breathing was oppressed, and there was some degree of coma. A large blister was applied. In the evening, omnia exacerbata—and a little after midnight he breathed his last.

Dr. Hosack, who was called in some days before the patient's death, augured badly from the first time he saw him, having seen some other instances of a similar nature turn out fatal. The following more recent, was also a more fortunate case.

G. Jerault, a stout man, aged 35, was admitted into the New York Hospital on the 19th June 1822, for an attack of irregular fever, which was treated by laxatives and diaphoretics.—This man had an enlargement of the lower jaw and tongue, so as to impede his speech, and which had arisen, it seemed, from a severe salivation induced one or two years before. The disease for which he had taken the mercury had been cured, but the chronic enlargement remained. After recovering from the fever, he again caught cold, and again was seized with febrile symptoms, immediately followed by an extraordinary swelling

of the tongue, causing it to protrude more than an inch from the lips, and greatly obstructing respiration. The progress of the enlargement was very rapid—the face was flushed—and the pulse high. He was immediately bled to between 30 and 40 ounces—deep scarifications were made with a scalpel in the tongue—a blister applied to the throat, and antimoniated purges given. These means were almost simultaneous, and they quickly produced relief. By a continuance of them the patient was soon well, as far as the tongue was concerned.

We here see the difference between riches and poverty.—Mr. Hamilton would not submit to those measures which saved the life of his less opulent countryman. In cases of glossitis, local detractions of blood by means of leeches or cupping, should be strickly attended to, as they are of far more consequence than general bleeding.

3. *Phlegmasia Dolens.* We took occasion, in our second number, to differ in sentiment with Dr. Davis respecting the pathology of phlegmasia dolens. In the present volume we have a Commentary on Dr. Davis's paper by the American Professor, from which we shall make only a single extract, showing the coincidence of opinion between Dr. Hosack and ourselves.

" Such are the facts adduced by Dr. Davis: but while it is acknowledged, that in this communication the author has made large and valuable contributions to the stock of knowledge, collected upon this interesting subject; the question now arises, how far do the facts he has disclosed warrant the inferences he has deduced from them? How far is the conclusion a legitimate one, that because the femoral and iliac veins partake of the derangement affecting almost every part of the limb, that they are necessarily the primary seat and source of the disease; and that the proximate cause, exclusively consists in an inflammation and obstruction of those vessels in particular? With due respect to Dr. Davis, I must be permitted to apply to his reasoning the same observation he has made, with regard to the dissection made by Zinn, and the inferences deduced from it by that author. 'In an analysis of this dissection,' says Dr. Davis, 'it is important to distinguish between the facts that are reported, and the opinion of the writer, as to the order of their relation to each other as cause and effect. In admitting, therefore, the fact of a diminution of diameter in the vein, we are by no means bound by the author's opinion as to the cause.' In like manner I observe, that the inferences deduced by Dr. Davis from the dissection, demonstrating the presence of inflammation in the principal veins of the thigh and pelvis, are altogether gratuitous, and to be received as a matter purely of opinion. And upon a careful examination of the general observations which the Doctor has added, in application of the facts which his dissections

have developed, to the phenomena of the disease, I have not been enabled to discover a single argument to show that it commences in the particular vessels thus affected ; on the contrary, many circumstances are stated which manifestly lead to an opposite conclusion." 228.

4. *Gout.* Dr. Hosack is led to conclude, *first*, that gout is not an hereditary disease, in the common sense of the term, but only so, as far as fortune, and its attendants, indolence, luxury, and intemperance, are hereditary. In this we do not agree with our intelligent author :—for although it is observed by Hoffman, that—" many have lost their gout with their fortune;" yet it has been observed by many others that this has not been the case ; but that the sins of the fathers have been visited on the children to the third and fourth generation.—*Secondly*, he concludes that gout, for the most part, takes place in the sanguine temperament, in the plethoric habit of body, and " is exclusively an inflammatory disease of the whole system, as well as of the part affected."

" 3d. That its associates, or vicarious diseases, apoplexy, palsy, angina pectoris, asthma, habitual catarrh, eruptions on the skin, obstructed viscera, and dropsy, arise from the same habit of body, and from the same causes.

" 4th. That the deposits of saline or earthy matter, which take place upon the joints in gout and rheumatism, in the kidneys and bladder, occasioning stone and gravel, in the brain of apoplectics, in the arteries of persons advanced in life, in the coronary vessels and valves of the heart, as frequently attendant upon angina pectoris and other diseases of that organ, have the same common origin, and that these extravasations are usually the effects of an overloaded state of the blood-vessels.

" 5th. That although the same earthy or saline materials exist in the blood in a state of health, and are constantly passing off in our excretions, as appears from the observations and experiments of Scheele, Wollaston, Brande, Pearson, Egan,* and others, they are in no instances the cause of gout ; but when deposited upon the joints in that disease, or upon other parts of the body, that such deposits are the effects of plethora, the parent of both.

" 6th. That the predisposing causes of gout in addition to the original vigour of frame, are the excessive use of wine, ardent spirits, animal food, the condiments of the table, and the neglect of the exercise necessary to counteract their effects upon the constitution. While the check of the excretion by the cold of autumn and winter, or the sudden impetus given to the circulation by the returning spring, prove the most usual exciting causes of this disease." 235.

* " Transactions of the Irish Academy."

7th. That, as the causes of gout are intemperance and indolence, the best preventives are temperance and exercise.

8th. That the most effectual means of treatment, in the first stage of the gouty paroxysm, consist "in depletion by the lancet, cathartics, and such remedies as operate by restoring the excretions from the surface of the body."

9th. That the part or parts affected should be lightly covered with flannel, during the febrile stage of the paroxysm, for the purpose of soothing irritation, and promoting a perspiration from their surface. Loading the limb with stratum superstratum of flannel, he equally condemns with the application of cold water.*

10th. That after the attack, tonics, bitters, restoratives, &c. are proper.

11th. That the eau médicinale is either useless or injurious.

Our readers are aware that the opinions and practice broached by Dr. Hosack, though not accordant with the sentiments of some living physicians who have written on gout, are nevertheless sanctioned by great names, among which may be reckoned Sydenham, Huxham, Cullen, Musgrave, Rush, and last not least, the late Dr. Parry of Bath.

Angina Pectoris. Dr. Hosack is mistaken in supposing that angina pectoris is considered generally by pathologists as depending on ossification of the coronary arteries. It is well known that various changes of structure in the heart—and even disorders of function, will induce the phenomena of the disease. Dr. H. has met with some cases attended with the most alarming symptoms, in which, after the paroxysms were removed by the usual diffusible stimuli, blood-letting and other depletory means were successfully employed, and ultimately effected a cure. From these and other cases which he has seen or read of, he has come to the firm belief that a plethoric condition of the sanguiferous system, both general and local, is to be looked upon as having, if not an exclusive, at least a predominant agency in the production of angina pectoris. This is too limited a view of the subject. The phenomena of the disease, as we remarked before, are the result of various organic as well as functional derangements.

6. *Secale Cornutum.* Dr. Hosack prescribed this remedy in three cases of long protracted labours, wherein all the or-

* "Every case," says Dr. Hosack, "which has come within my knowledge, where the practice of immersing the limb in cold water at the invasion of gout has been habitually pursued, has ended in apoplexy or palsy."

dinary resources had been exhausted (the use of instruments excepted) and the patient's strength had become expended. It was given in infusion, and in the usual doses. Its effect was, within fifteen minutes after its exhibition, to excite the uterus to violent action, which did not cease but with the expulsion of the child. The children were still-born in these and in all the other cases which Dr. Hosack has seen of the administration of the ergot. "The ergot has been called, in some of the books, from its effects in hastening labour, the *pulvis ad partum*:—as it regards the *child*, it may, with almost equal truth, be denominated the *pulvis ad mortem*." Dr. Chapman, however, states that it has been administered by himself and others in a hundred instances, without doing harm in any respect. Dr. Hosack apprehends, that, in these cases, the impediment to labour has been so inconsiderable that the child was readily expelled under the influence of the ergot, and where perhaps no necessity existed for its exhibition. Granting that this surmise is correct, it only proves that it is not the ergot which destroys the life of the child, but the difficulties which it meets in its expulsion from the womb.

While Dr. Hosack is inclined to proscribe the ergot altogether in cases of difficult parturition, preferring the forceps, he conceives that, from the active operation of this medicine on the womb, it promises to be very extensively useful in counteracting many morbid conditions to which that viscus is liable, especially those proceeding from an inactivity in its muscular powers, or lax state of its vessels, as in retention of the placenta—excessive discharges of the lochia—fluor albus—uterine hæmorrhage. An instructive case of this last is here related, and as it is very short, we shall give it in the author's own words:—

"Mrs. L——, a lady about fifty years of age, of a plethoric but relaxed habit of body, ceased to menstruate about four years ago. Since that time she has evinced the ordinary symptoms of fulness of the blood-vessels, that frequently supervene upon the cessation of that function; viz. a sense of distension and pain in the region of the uterus; a fulness of the breasts; oppression of the chest; frequent headache and giddiness. By blood-letting these have been several times removed: but neglecting this remedy when those feelings returned, uterine hemorrhage was the result, followed by great loss of strength. In this debilitated state, in which further depletion was forbidden, I had recourse to the various vegetable and mineral astringents, administered internally and externally, but without effect; cold also was applied to no purpose. In this lax state of the uterine vessels, I directed ten grains of the ergot to be given in substance three times a day. In

a few minutes after the exhibition of each dose, it was followed by the uterine nisus, which immediately stanched the discharge. In a few days, by suitable nourishment, and the continuance of the tonics which she had before employed without the effect of restraining her discharges, she recovered her strength.

"In the course of the last month, she experienced some return of the hemorrhage; but, by a few doses of the ergot, the discharge was as immediately restrained as it had been in the first attack." 300.

7. *Death of Mr. Cooke the Tragedian.* It is well known that this celebrated actor was excessively intemperate in drink. He died in America of dropsy, and apparently enlarged liver. On dissection, the medical attendants were surprised to find the liver not exceeding the usual dimensions. "It was, however, astonishingly hard, and of a much lighter colour than is natural to that organ." Its texture was so dense as to make considerable resistance to the knife. In its internal structure it was so hard and unyielding, that very few traces of its vessels could be found, and the circulation through it had evidently long since ceased to be regularly performed. It exhibited precisely that peculiar tuberculous appearance which was first pointed out by the late Dr. Baillie. The tubercles were not confined to the surface, but extended throughout the greater part of the substance of the liver.

We must now draw our short notice of Dr. Hosack's volumes to a close. A great part of the second volume is occupied with observations on the weather and diseases of New York, which can only be interesting to our transatlantic readers, and they have the original work. We therefore take leave of our able anthor with every sentiment of respect and esteem.

V.

Original Cases with Dissections and Observations illustrating the Use of the Stethoscope and Percussion in the Diagnosis of Diseases of the Chest; also Commentaries on the same Subjects selected and translated from Avenbrugger, Corvisart, Laennec and others. By JOHN FORBES, M.D. Physician to the Chichester Dispensary. 8vo. pp. 305, three plates. August 1824.

WE were the first in this country to give an extended analysis of Laennec's immortal work, and to express our conviction of

its superior merits.* We immediately procured some stethoscopes from Paris, and had others made in London, whence a very great number were diffused among the profession. We much doubt with Dr. Forbes, that the discovery of mediate auscultation has not been appreciated, as it deserves, in these kingdoms—at least, if we may judge from the paucity of notices respecting it in the public journals.

Dr. Forbes, therefore, deserves great praise, not only as the translator of Laennec's work, but as an able cultivator and zealous promoter of the science of diagnosis as applied to diseases of the chest. By careless routinists, and even by many from whom we might expect better things, minute diagnosis is despised, because, say they, the same treatment applies to the greater number of those diseases that are likely to be confounded—while in those that are incurable it is useless, as all treatment is unavailing. It is certainly true, that precise discrimination of different diseases or different shades of the same disease, may not at present, or perhaps ever, increase our power of curing or even relieving them. But it may prevent our doing harm :—it may prevent our pursuing means that are useless or injurious—and it *will undoubtedly* enable us to avoid a false diagnosis and prognosis on very many occasions, and give a true one, by which our reputation becomes enhanced, and the dignity of the science maintained. When insisting on the advantages to be derived from auscultation and percussion, we are very far from believing that these means are to supersede in the slightest degree the common means generally pursued—namely, a minute inquiry into the history of the disease and mode of life of the patient, together with a very particular examination of the various vital and natural functions. Very often when we cannot cure or make any impression on the main or ultimately fatal disease, we can yet so ameliorate certain symptoms consequent on it, and relieve certain functions disturbed sympathetically by it, as to render the remainder of life comparatively comfortable. We dwell the more earnestly on the common means of investigating diseases, because, in this country at least, we greatly fear that auscultation, particularly by means of the stethoscope, never can come into general use *in private practice*. In hospitals and other institutions of that kind, however, the physician has opportunities of cultivating this means of diagnosis, and he is culpable not to do so, because *occasionally* he will be able to turn his knowledge to account in the private walks of his

* Medico-Chirurgical Journal, January 1820, pp. 461, et seq.

profession. We shall give an illustration from Dr. Forbes's preface.

"Suppose two physicians of equal skill and experience, but only one an Auscultator, met in consultation, for the first time, on a case of Chronic Pleurisy or Peripneumony, in no very advanced stage. Probably the only remarkable symptoms are, a violent cough with little or no expectoration, more or less dyspnœa, especially on motion, and incapacity to assume, with comfort, certain postures; the pulse perhaps is natural, there is no pain, no febrile heat, no hectic, and inconsiderable loss of flesh; or, perhaps, one or other of these states may exist. From these general symptoms, will he who is not the Auscultator venture to pronounce, with any degree of confidence, his opinion of the precise nature of the disease; much more to declare it to be one that will almost certainly prove fatal, and scarcely even admit of relief from any kind of treatment? No practitioner, I affirm, judging from the common symptoms only, can be justified in entertaining such opinions. But if, to the examination of the symptoms, be superadded the exercise of percussion, or the exploration by the stethoscope, for only two or three minutes; and if the former elicits the preternatural or fleshy sound over the whole of one side of the chest, or the latter indicates the absence of respiration over the same space; then, at once, are obtained sufficient materials (conjointly with the previous history and present symptoms of the case) to form a correct diagnosis, and to justify and authorise the most ominous prognosis. Were the benefits of Auscultation confined to this single case of disease, it would, even then, be entitled to the highest consideration." xviii.

Our author makes some very judicious reflections on the error of over-rating pathology, at least *post mortem* researches. We nave often called the attention of our readers to this subject. On the Continent they do not look sufficiently to the preceding functional disturbances that lead to organic changes of structure. All their attention is fixed on what remains to be seen after death. Our author well observes that—"this mode of judging of the character of diseases is scarcely more just than would be that of the biographer, who would draw the character of his hero from the last act of his life only, without any regard to his previous conduct." Dr. Forbes begins, like most men who are conversant with disease, to be sceptical as to the power of medicine over changes of structure. Nature, no doubt, sometimes removes organic changes by the same powers with which she has produced them—and she may be stimulated to this operation by medicinal agents. But undoubtedly we can seldom calculate on such fortunate occurrences. Our main hopes rest on correcting or altering *morbid function*. Our Continental brethren are too inert in their measures for this purpose—and many, very many of the

British faculty are too active in the ulterior stages of disease, where morbid function has ended in, or rather produced, disorganization. In this way our author thinks, that "the accounts between the two countries may come, in the end, to be nearly balanced." In this judgment we can hardly agree with our excellent author. We hold it to be an axiom that life is more endangered—that the sum total of mortality is more augmented by inert measures in the beginning, than by too strong measures towards the close of an acute disease.—The Hippocratic practice suffers curable to pass into incurable disorder—heroic remedies and ultra-depletion, in late stages of disease, where structure has become changed, only precipitate a fate that would be pretty certain, whatever was the practice. In this respect the British must be considered superior to the Continental methodus medendi. Indeed it is quite evident that the French themselves are opening their eyes to the dangers of the *medecine expectante*, for scarcely a month passes without seeing some reflection thrown out against it, and some advance to a more energetic manner of treating acute diseases.

"The practical conclusion from all this ought to be, not to disregard pathology, but only to cultivate it in a more philosophic spirit. To derive benefit from our dissections, we ought quite as much to reflect on what was the cause and early character of the organic change which we see consummated, as to study the actual nature and final amount of this change. Without this retrospective ratiocination, and practical dedication of his researches, the morbid anatomist is more an artist than a physician; and his devotion to science is, to use the language of Bacon, rather idolatry than true worship." xxii.

While it is the object of the volume before us to recommend auscultation and percussion, he warns the profession against an exaggerated expectation of its applicability. He thinks, and with reason, that in the greater number of the more recent inflammatory affections, auscultation may be dispensed with, the common symptoms being generally sufficient to regulate our practice. At the same time he appears to think that, even here, percussion and the stethoscope would render our judgment and practice, in many cases, more satisfactory and certain. It is in *chronic* diseases, of course, that these diagnostic means are of the greatest importance.

We beg leave to suggest the propriety of simple or immediate auscultation with the ear, as little inferior to that with the stethoscope, and much more applicable to private practice. In examining the chests or abdomens of patients affected with chronic diseases, we invariably strip them so as to see the conformations of the thorax and abdomen, as well as to use thoracic

percussion and abdominal compression. We then find no difficulty in adding, if we see occasion, auscultation with the naked ear. But certainly the application of the stethoscope carries with it an *appearance* of quackery, which it is desirable to avoid, at least among the higher ranks of society, who are apt to canvass a medical man's actions, as well as words. In hospital practice, as we before observed, the stethoscope should be diligently studied and applied.

But we must hasten to a conclusion of Dr. Forbes's preface. He asserts, and we are convinced that his assertion is most true, that in publishing this volume he is actuated by the very best motive that a medical man can allege—namely, the conviction that the work is wanted, and that it will prove useful to his brethren.

As it now stands, the publication consists of, *first*, a translation of Avenbrugger on percussion, with the valuable commentaries of Corvisart—*Secondly*, a brief view of the principles and practice of mediate auscultation, reprinted, with inconsiderable alterations, from Dr. Forbes's translation of Laennec, now out of print—*Thirdly*, a series of *original cases* in illustration of auscultation, percussion, &c.—and *lastly*, an appendix containing a compendium of Dr. Collin's Essay on the different modes of exploring the chest.

The work of Avenbrugger was published more than sixty years since. Although it is acknowledged to contain false theories and incorrect opinions, it is certain that it also contains many sterling truths, the discovery or perfection of which has been attributed to more modern writers. The author was born in Styria in 1722, and, it is said, he lived till 1809. Little is known of him, except that he wrote also on madness, and on dysentery. He is reported to be the author of a *drama*. The work on percussion made little impression in Germany, and was still less known practically in France, till the year 1788, when Corvisart introduced it, and enforced it by precept and example. After twenty years' experience, this celebrated physician established the practice on a lasting foundation by his translation of and admirable commentaries on, the original treatise of Avenbrugger. The practice has long been extensively employed in France, and especially in Paris, as a common and indispensable measure in studying diseases of the chest. How little it has been attended to in this country may be inferred from the circumstance that it is not even named in the best popular elementary or systematic works—E. G. in the publications of Parr, Gregory, or Good!—It is very certain, however, that the late, lamented Dr. Baillie employed percussion pretty generally in the investigation of

thoracic diseases—and that probably no inconsiderable share of his reputation was owing to this practice as an auxiliary to correct diagnosis and prognosis. Examination of the chest by percussion, and of the abdominal viscera by pressure, is now practised by several of the best pathological physicians in this metropolis—and no doubt in various parts of the kingdom. The principles on which the practice is founded are so very little known, that we shall dedicate the greater part of this article to a pretty full enunciation of them, as contained in Avenbrugger's work and Corvisart's commentaries.

PERCUSSION OF THE CHEST.

"*La percussion de la poitrine est, sans contredit, l'une des découvertes les plus precieuses dont la medecine se soit jamais enrichie.*"—*Laennec.*

We shall not particularly adhere to the distinctions between the text of Avenbrugger—the commentary of Corvisart—or the notes of Dr. Forbes—our object being to convey a general idea of the whole subject, as collected from all.

The sound elicited by percussion from a healthy chest resembles the stifled sound of a drum covered with a thick woollen cloth or other envelope. The method of eliciting this sound, in other words, of applying percussion, is first to be described.

The thorax ought to be struck gently with the points of the fingers brought close together, but at the same time extended. Percussion with the flat open hand is also sometimes useful, especially on the lateral and posterior parts, (so thinks Corvisart) and therefore the two modes may sometimes be conjoined in the same case. In fat and robust subjects the percussion should be stronger; and in all cases we are to apportion the impulse according to the thickness and other circumstances of the parietes, for in this consists the great art of *applying* percussion. If it is not agreeable to the patient to be entirely stripped, the shirt or chemise should be drawn tight over the part to which percussion is applied. The sitting posture is the best for the patient, who should be directed to hold his head erect, and keep the shoulders back, in order that the chest may protrude, and the skin and muscles be drawn tight over it. This is, of course, when the fore part of the chest is to be struck. During inspiration and the retention of the breath, the sound is every where louder than during expiration. While striking the ribs, or lateral parts of the chest, the patient should be directed to hold his arms across his

head, for the obvious reason of rendering the thoracic parietes more tense. In operating on the back, the person is to bend forward, and draw his shoulders towards the anterior part of the chest, for similar reasons. It is obvious that in some acute diseases we cannot secure these advantageous positions; but we ought to come as near to the above rules as possible. Nothing but exercise of percussion on sound and unhealthy subjects can give us the *tactus eruditus* in this mode of exploring the chest, and distinguishing its diseases.

Having laid down the mode of applying percussion, let us now see what is the result.

The sound, previously described and which may be made familiar to the ear by trying on healthy subjects, is perceptible in different parts of the chest, as follows:—On the *right* side *anteriorly*, it is observed from the clavicle to the sixth true rib—*laterally*, from the axilla to the seventh rib—and *posteriorly*, from the scapula to the second and third false ribs. Disease of the liver, however, or other abdominal organs, by encroaching on the chest, will sometimes contract the aforesaid sonorous sphere. On the *left* side, the sound can generally be heard lower down than on the right, owing to the absence of the liver, and the presence of the stomach or colon containing air. The sound obtained by percussion over the region of the heart varies extremely in different persons. In those that are spare, with a weak pulse, or where the heart is small, the sound is scarcely at all altered in the region of that organ—while in others, of opposite temperament and habit, it is with difficulty perceived. Disease will sometimes produce the same effect. Thus in phthisis, with much emaciation, the presence of the heart seems hardly to weaken the sound at all. The whole sternum yields as distinct a sound as the sides of the chest, except in the cardiac region, where it is somewhat duller, though this difference is seldom perceptible. That part of the spinal column which contributes to form the chest emits a sound, but duller than the sides of the thorax.

In fat or very robust persons, the sound is very dull or almost lost. The most sonorous region is from the clavicle to the fourth rib anteriorly. Lower down, the mammæ and pectoral muscles deaden the sound.

So much for the natural sound in health. We now necessarily come to the preternatural or morbid sound, emitted by the chest during percussion—and its general import. It is almost needless to observe, that the healthy sound and all its modifications, according to situation or habit of body, should be first studied, before we can attempt to appreciate its de-

viations in disease, in the same way that common anatomy must be learnt before we can judge of morbid changes of structure.

1. If then a distinct sound, equal on both sides, and commensurate to the degree of percussion, be not obtained from the sonorous regions above mentioned, a morbid condition of some of the parts within the chest is indicated. "The least sonorous side (Corvisart) is certainly diseased." Avenbrugger and Corvisart aver, that "diseases of the worst description may exist within the chest, unmarked by any symptoms, and undiscoverable by any other means than percussion alone." A clear and equal sound elicited from both sides of the chest indicates that the air cells of the lungs are free, and uncompressed by either a solid or liquid body, with exceptions which will be mentioned anon. Where the sound then is good, the practitioner may feel assured, that, however much the chest may seem to be engaged, there is, as yet, no organic lesion of consequence there. This conviction will allow his observation to be directed to other parts of the body, where may be the real seat of the affection, some of the sympathetic effects only of which had previously engaged his attention.

If a sonorous region of the chest be entirely destitute of the natural sound, on percussion, yielding only a sound like that of *a fleshy limb*—in that region disease exists, commensurate with the extent of unnatural sound. If this bad sound continues when the patient holds in his breath after a deep inspiration, disease extends profoundly into the cavity of the chest. If the same results are obtained both before and behind, on points precisely opposite, we may conclude that the disease occupies the whole diameter of the chest. In short, under such circumstances, we are authorized to conclude that the obstructing body either entirely pervades, or has, in a great measure, displaced the lung, and excluded the air. "Such varying results," says Avenbrugger, "depend on the greater or less diminution of the volume of air usually contained in the thorax (lungs); and the cause which occasions this diminution, whether solid or liquid, produces analogous results to those obtained by striking a cask, for example, in different degrees of emptiness or fulness: the diminution of sound being proportioned to the diminution of the volume of air contained in it." This illustration is no less happy than just—but it affords us no criterion whether the obstructing body be solid or fluid. Such criterion Corvisart avers that he has discovered by placing the patient, while under percussion, in different positions, as in the erect and horizontal. If the obstruction consist of a *fluid*, it will vary its level, with a corresponding variation of sound—on the other hand, if it be a solid, the

same results will be obtained in every position. This, of course, will not hold good when the cavity of the chest is quite full of fluid, or where there is chronic pleurisy occupying only a part of the chest, in which case, the fluid is generally confined by false membranes. It is only applicable to simple hydrothorax.

2. The application of these principles to diseases.

It may be stated as a general fact, according to Corvisart, that all diseases of the chest, whether acute or chronic, occasion the preternatural sound, either during their progress, or towards their termination. He does not even exclude those nervous asthmas and violent coughs which appear, in the first instance, at least, to depend on irritation of the nerves of the part. In almost all these cases, we find, after death, some induration, effusion, or other morbid change.

"In peripneumony," says Corvisart, "and pleuro-peripneumony, if the inflammation is acute, the morbid sound is perceptible on the second, third, or fourth day at farthest: the natural resonance gradually lessens, and is entirely lost by the sixth or seventh day, if the disease is to terminate fatally. On the other hand, it gradually reappears if a recovery takes place. In the more severe and simpler cases, the common symptoms are less equivocal; but in the more complicated and obscure examples of the same disease,—without percussion, how shall we ascertain the real state of the lungs, or be able to avoid committing ourselves by unwarranted opinions and false prognostics? In such cases, effusions into the pleura, or vomicæ take place insensibly; and frequently under the deceitful mask of an amendment of symptoms, or even of convalescence. The result, however, soon shows the false security of the practitioner. These grievous mistakes can only be avoided by the employment of percussion." 19.

The following corollaries are drawn by Avenbrugger, as the result of his observations in inflammatory diseases of the chest, studied under the sign of morbid resonance.

1. The duller the sound, and the more nearly approaching that of a fleshy limb stricken, the more severe is the disease. —2. The more extensive the space whence morbid sound proceeds, the more certain is the danger from the disease.—3. The disease is more dangerous on the left than on the right side—probably from the vicinity of the heart.—4. A morbid sound emitted from the superior and anterior part of the chest (from the clavicle to the fourth rib) indicates less danger than from the inferior parts of the thorax.—5. The want of natural sound behind indicates more danger than on the anterior and superior parts of the chest. This is sufficiently accounted for by the greater volume of the lungs behind.

"6. The total destitution of sound over one whole side, is generally (passim) a fatal sign.

"*Comm.* This total want of the natural sound over one whole side of the chest, may arise either from a hepatization of the lung, or from an effusion into the cavity of the pleura: in either case, I am of opinion with *Stoll* (Aph. 140), that, if not always, at least in an immense majority of cases, the event is fatal.

"¶. My own expperince, says Dr. Forbes, "and (what is of much greater authority with me) the testimony of Laennec, would lead me, on the contrary, to believe, that the proportion of fatal cases, under such a sign, is not so immense. In that particular termination of acute pleurisy, so beautifully described by Laennec under the name of 'contraction of the chest'—and of which instances are by no means extremely rare,—the natural sound is not only wanting over the whole affected side, but, according to the author just mentioned, never returns, even after the recovery of the patient."—TRANS. 23.

7. The absence of sound along the sternum is a fatal sign. On this Corvisart observes, that "a collection of matter in the anterior mediastinum (the only case likely to produce this sign) is generally, though not always a fatal affection."—8. The entire absence of the natural sound over a large space in the region of the heart, is a fatal sign. This, Corsivart thinks, indicates an inflammation, acute or chronic, of the pericardium (or perhaps the heart) with a purulent or serous effusion in this cavity.

3. *Chronic Diseases.* The preternatural sound emitted in chronic diseases is owing, according to Avenbrugger, either, *first*, to some hidden condition of the organs, disordering, and finally destroying them by a slow process—or, *secondly*, exists when certain obvious causes have induced a slow disorganization of the same. Percussion is, therefore, proper in all chronic diseases—for whether we know the precise cause or nature of the disease, it will at least be an advantage to know that there *is* organic disease. Under the first class of causes Avenbrugger ranges hereditary predisposition—affections of the mind, particularly nostalgia—and certain trades or professions. Nostalgia seems to have occupied a good deal of our author's attention, and he avers that it is a strong cause of pectoral disease. "I have examined," says he, "the bodies of many youths who have fallen victims to it, and have uniformly found the lungs firmly united to the pleura, and the lobes on that side where the obscure sound had existed, callous, indurated, and more or less purulent." In respect to trades, he has particularly remarked that tailors, millers, &c. who are forced to inhale, during their labours, a fine dust, be-

come phthisical—while shoe-makers, weavers, &c. from forced position or application of their weak chests, become asthmatical, with indurated lungs, &c. The following is Corvisart's commentary on nostalgic affections.

"All the great and more profound mental affections are powerful causes in the production of corporeal disease. They principally affect the functions of the organic life: the organs concerned in circulation, respiration and digestion are especially modified; but the functions of secretion, exhalation, absorption, and nutrition, which seem at first untouched, eventually undergo no less essential changes. These organic modifications vary with the particular causes. Thus anger, by directly acting on the circulation, occasions dilatations of the heart, &c. Joy, on the other hand, merely augments the actions of the same organs in a slight degree, and determines the blood toward the surface. Grief produces a directly opposite effect: it debilitates the whole vascular system, obstructs the course of blood towards the capillaries, and thus occasions that general paleness, which is most conspicuous in the face: from this result a deficiency of blood on the surface of the body, and a superabundance in the larger vessels,—occasioning the sighing, oppression, and palpitations, the passive dilatations of the heart, the engorgement of the lungs, their adhesion to the pleura, and the diminished resonance described by Avenbrugger. To these causes may be added the derangement of digestion, which is found to be an inseparable attendant of long continued moral affections, and which inevitably induces such a state of general debility as greatly predisposes our various organs to be acted on by the morbific causes to which they are exposed.

"It is to be regretted that Avenbrugger confined his anatomical examination of such cases to the lungs; as I am led to believe from the causes and symptoms of the disease, that the heart and great vessels would have been found equally affected." 27.

Here both Avenbrugger and Corvisart give testimony to the insidious nature of pulmonic affections, which simulate various diseases or lie masked themselves, thus completely deceiving both patient and physician.

4. *Extravasations within the Chest.* When, from any cause, there is an effusion of fluid, in any considerable quantity, the preternatural sound will exist over the space occupied by it.

5. Our author properly observes, that there are many apparent diseases of the lungs, which have their real seat in other parts, especially in the abdomen. These affections rarely give rise to the preternatural sound. "From the absence of this, and the presence of a copious watery urine, their existence (as sympathetic affections) may be pretty confidently presumed." We shall give Corvisart's commentary on this point, as it ex-

hibits a considerable coincidence with the writings of Dr. W. Philip and others in this country.

"Most of the affections mentioned in the preceding paragraph, I consider as purely sympathetic, and as depending, in general, on disorder of the digestive organs. I agree with the author that such affections are, in their earlier stage, not discoverable by means of percussion; but as nothing is more common than the conversion of those disorders which are called nervous, into affections truly organic of the heart or lungs, there is no doubt that eventually they become discoverable by this means. The origin of pulmonary disorders, in nervous affections attended by a cough is easily explained. Besides, who has not observed that a great proportion of nervous women die phthisical? It is also true that disorders of the stomach induce pulmonary phthisis. In long continued derangements of the digestive organs, congestions will almost certainly ensue in some of the abdominal viscera, which while they impede the function of respiration (mechanically or by sympathy,) will necessarily in the end affect the lungs themselves. The continued irritation will produce an indolent state of phlogosis, which may be considered as the first stage of those structural lesions which constitute phthisis; and which will be followed by tubercles, &c. I may add, that those secondary consumptions, whether the consequence of nervous affections or gastric disorder, would be of extremely difficult recognition, but for the aid afforded by percussion,—inasmuch as it is their peculiar character, that the symptoms of the primary disease still continue, for some time, the more conspicuous of the two," 31.

A slight engorgement of the lung, an hepatization to a trifling extent, a small vomica, an inconsiderable extravasation, are not detected by percussion. Corvisart, however, seems to think that an experienced hand would detect a vomica the size of a common walnut, if situated on the surface of the lungs.

6. *Appearances on Dissection, where morbid sound has existed.*—These are scirrhus (he means what we now denominate induration or hepatization)—vomica—purulent vomica—empyema—dropsy—extensive extravasation of blood—aneurism of the heart. Corvisart's commentary on hepatization, is as follows:—

"I am ignorant of the precise nature of this affection. I think it is generally formed slowly and insensibly, as in the case of artisans exposed to a dusty atmosphere, or as a sequel of acute disease. Perhaps, also, it may originate spontaneously, and be the result of a very slow latent peripneumony, &c. The term *carnification*, lately applied to this affection, is inexact, inasmuch as the character of the lung is not at all like muscular *flesh*, but like *liver*: on this last account the term *hepatization* is much more correct and appropriate. In this variety of morbid structure what becomes of the blood-vessels, bronchia, vesicles, glands, and nerves of the pulmonary organs?" 34.

As this hepatization is a very frequent occurrence, and very difficult of detection, by symptoms alone, we shall quote the observations of Avenbrugger on this point.

"Together with the diminution or entire loss of the natural sound over the affected part, there is an infrequent cough without any expectoration, or with only a scanty excretion of viscid and crude sputa. During a state of quiescence there is nothing to be observed much amiss, either in the condition of the pulse or respiration; but upon any considerable bodily motion, or after speaking for some time, these persons become speedily exhausted, anxious, and breathless, and complain of a sense of dryness and roughness in the throat. At the same time the pulse, which had previously been of moderate frequency, becomes quick and unequal; the respiration and speech are broken and interrupted by sighs; the temporal, sublingual, and jugular veins of the affected side, are more than usually distended; while it will be observed that this side of the chest is less moveable than the other, during inspiration. Meanwhile the natural and animal functions continue to be well performed; and the patient can lie on either side indifferently." 36.

To the foregoing signs of pulmonary hepatization, which are exceedingly just, Corvisart has added the following, which are also very valuable. He avers, that they are *invariably* present in hepatization.

"1. *Progressive emaciation*, although sufficient nutriment be taken;—2. a low febrile diathesis;—3. a feeling of oppression and weight, but without pain, in the affected side. From the manner in which the author terminates his description of this disease, one might be led to imagine that it might remain stationary without necessarily abridging life. The truth however is, that it proves fatal more frequently in its indurated, than in its suppurated state. When it has reached the height indicated by the signs above detailed, it increases rapidly, and its fatal termination is precipitated by additional symptoms. The appetite gradually decreases; the sleep is lost; great anxiety prevails; and the character and temper are entirely changed, the patient (although naturally placid) often becoming harsh, violent and irritable, and extremely desponding. There are partial sweats on the breast and neck, sometimes warm, more frequently cold, and followed by fainting. There ensue frequent paroxysms of extreme breathlessness. The patients are now confined to bed in a state of complete marasmus. Some can lie on the back; others can bear only a sitting posture; in the last days of life none can lie down except on the affected side. Sometimes there is slight delirium, sometimes not; sometimes there is œdema of the limbs of the affected side, but more commonly there is none. Before death the pulse becomes small, unequal, and intermittent." 37.

In respect to the *progressive emaciation*, we can vouch, from our own observation, that this symptom is not *invariably* pre-

sent in hepatization of the lungs. Within these few months, two instances occurred in our own practice which shake the foundation of Corvisart's rule. One was a young lady, whom we examined in presence of Dr. Copland, who had been epileptic from birth, but who died rather suddenly, bringing up purulent matter. One lung was completely hepatized, except where some vomicæ, situated in it, were broken down, and communicating with the principal ramification of bronchia in that side. Yet this young lady was very far from being in a state of emaciation, although harassed with cough for some years. We were curious in this instance to examine the brain of a person epileptic from birth till the 34th year, when she died. We found the skull excessively hard—and the substance of the brain itself was of such a dense consistence, in several places, that it cut like leather. The basis cranii was exceedingly jagged with sharp spiculæ of bone, and all the ridges and prominences were remarkably acute and pointed. The other case was that of a lady in Chandos street, who also died suddenly when apparently convalescing from pleuritic inflammation. The pain of side, the difficulty of breathing, the cough, and the pyrexial heat had subsided, under the usual means; but the pulse kept up above 120, with a cool skin, face rather pale, and some tendency to delirium. She was suddenly seized with a sense of suffocation in the night, and expired after a few hours' struggle, without bringing up any expectoration. We found three-fourths of the right lung completely hepatized, so that no trace of its natural organization remained visible. There were some tubercles in the left lung, and an effusion of muco-purulent matter into the bronchia.—In this case there was disease of the heart, the parietes of which were remarkably extenuated, and so flabby that the finger easily went through the substance even of the left ventricle. Dr. Henry Davis, Mr. Morris, and Mr. Wray, were present during the examination. This lady had been subject to cough, dyspnœa, and pain in the right side for some years; but she was so uncommonly embonpoint that the fat on the sternum was more than an inch in thickness. We could adduce other instances of a similar kind; but the above are sufficient to show that exceptions to Corvisart's rule are not of very rare occurrence.

Avenbrugger's remarks and Corvisart's commentaries on the subjects of vomica and empyema are not particularly interesting, in the present state of our knowledge on these points. We shall, therefore, pass them over.

Hydrothorax. Avenbrugger was not careful enough to distinguish idiopathic from symptomatic hydrothorax. The fo-

mer disease is doubtless very rare, as Corvisart has justly remarked—the latter very common, in consequence of the great number of organic diseases by which we are afflicted, and of which hydrothorax is only a symptom or effect. The commentary of such a man as Corvisart, on Avenbrugger's list of symptoms attending hydrothorax, is worthy of a place in this journal.

"*Comment.* The author's distinction of hydrothorax according as one or both sides are affected, although useful and proper, and easily known by means of percussion, is merely a difference of *quantity*, and would, I think, be better expressed by the terms *partial* and *complete*. But the essential grounds for different species of dropsy is a difference in their nature and causes; and hence the grand natural division of these must be into *Primary* and *Symptomatic*. Without this distinction there will always be the greatest confusion in characterising them by any signs or symptoms.

"[I shall now remark, in order, on the various symptoms enumerated by the author, and shall repeat the notation and titles employed in the text, for the sake of easy reference.]

"1. *Difficult respiration.* The respiration, strictly speaking, is not difficult or laborious, except on exertion; it is short and confined, yet performed with sufficient calmness. The cause of the short breathing is obvious.—But even if the respiration were laborious, this would still be but a very equivocal symptom, as it exists in many other affections, e. g. in all the diseases of the heart, large vessels, or lungs; in true asthma, &c.

"2. *Cough, &c.* The intervals between the fits of coughing are long, and the cough itself is generally inconsiderable and without any violent paroxysms.

"3. *The Pulse.* The characters of the pulse in the idiopathic hydrothorax, are absolutely the reverse of those given by our author,—it being, most commonly, *full*, *somewhat soft*, *slow*, *quiet*, *regular*,—feebler and more frequent according as the complaint increases, but always remarkable for regularity. These, at least, are the qualities of pulse which I have observed in similar cases, and I have had occasion to witness a great many, considering the infrequency of this disease in its state of simplicity.

"In organic diseases of the heart and great vessels, however, one of the principal symptoms is the deranged condition of the circulation,—the pulse being, at different times, *hard*, *full*, *vibrating*, *frequent*, *irregular*, *greatly intermitting*, *undulating*, in short, varying extremely. It would appear, then, from this statement, that in the cases of hydrothorax, wherein Avenbrugger had observed the kind of pulse mentioned by him,—there existed some primary organic lesion of the heart or large vessels, of which the hydrothorax was merely a consequence;—as it is known to be one of the most common.

"4. *Breathlessness on motion.* This symptom is always present, and is easily explained on mechanical principles. It is, however,

a very equivocal sign of hydrothorax, since it is found in all other diseases which produce a proportionate impediment to the introduction of the necessary quantity of air into the lungs,—such, for instance, as a scirrhus or vomica of the lungs, empyema, aneurism, &c.

"5. *Nausea, &c.* I consider this sign as insignificant.

"6. *Præcordial anxiety.* This symptom is not usually present in idiopathic hydrothorax, but commonly attends the cases resulting from disease of the heart. It is, therefore, an equivocal mark of simple hydrothorax.

"7. *Oppression of the chest after eating.* This is readily explained by the pressure of the enlarged stomach on the diaphragm.

"¶ I wonder that the commentator does not remark the equivocal character of this symptom also, since it exists in almost all diseases of the heart and pericardium.—TRANS.

"8. *Flatulence.* The discharge of this gives momentary relief in hydrothorax, on the same principle that the retention of it occasions uneasiness: it cannot, however, be properly reckoned as a symptom of this disease in particular.

"9. *Thirst.* I consider (with the author) this to be very rare in the idiopathic affection, but not so in the symptomatic.

"10. *The Urine.* The state of this excretion described by the author is common to every species of dropsy.

"11. *Epigastric tumour.* Explained on mechanical principles.

"12. *Livid œdema of the extremities.* This symptom rarely exists in primary hydrothorax, and is rather to be considered as a sign of organic disease of the heart.

"13. *Œdema of the eyelids.* This symptom is certainly common in primary hydrothorax, but exists also in many other affections.

"14. *Paleness or lividity of countenance.* In hydrothoraxt he face is generally pale, wasted, anxious, and not swollen; the lips pale and thin; the tongue neither pale nor livid. All the symptoms of lividity depend on an affection of the heart or great vessels.

"15. *Anxiety, inability to lie down, &c.* I would say that none of the symptoms here enumerated belong to simple hydrothorax, which is a disease of comparative tranquillity and sameness. In the same affection, however, resulting from diseased heart, all the symptoms enumerated exist in a high degree." 51.

The veteran Corvisart makes a remark here, the justice of which we have had several opportunities of witnessing; namely, that in hydrothorax, even of both sides of the chest, the patient is often able to lie down in the horizontal position. He avers, however, that this ability is never seen in hydrothorax dependent on disease of the heart. Certainly in those cases where we had opportunities of dissection, and where this unexpected ability had obtained, there was not disease of the heart, though generally of some other organ. Still we are disposed to think Corvisart's rule too positive, as indeed are most of his rules. Corvisart is doubtless right

when he observes, that simple idiopathic hydrothorax is a very rare disease. His description, therefore, of such a malady is valuable, since few have had such means of laying down their diagnostic didactics on the extensive basis of *post mortem* examination. We shall give his description, as it is very concise.

"In recognising this affection, it is important to study its causes and the previous history of the individual. When idiopathic, its attack is generally sudden, and succeeds to cold drinks—the suppression of accustomed evacuations,—the measles, &c. &c. When any of these causes have preceded the disease, and none of the symptoms peculiar to organic lesions of the lungs, heart, or great vessels have done so,—there exists already much probability of the uncomplicated nature of the dropsy.

"The patient at first complains of a sense of weight, uneasiness and weakness, of anxiety and pressure at the præcordia, and a difficulty of breathing, at first perceived only in the act of ascending, or on using considerable exercise. The appetite decreases, the thirst augments, the urine is somewhat more scanty, commonly natural in colour, sometimes red, and when depositing a sediment (which is rare) this is commonly lateritious. There is an occasional cough, usually dry, or with slight mucous expectoration. In the progress of the disease, the countenance gets daily more pale, withered and anxious, but without œdema; the eyes are dull and heavy, and gradually lose their natural expression; and the lips pallid and thin. If the effusion is confined to one side, this is observed to become more rounded, and the intercostal spaces larger, as the water accumulates: this is followed by œdema of the same side of the chest, and sometimes of the arm of the same side,—a local affection unconnected with the œdema of the lower extremities, which afterwards comes on. At this period, percussion gives certain indications of the quantity of the fluid. During almost the whole course of this disease the patient can lie horizontally, on either side, or on the back; in the very last stage of it, he frequently lies obstinately on the affected side, if the effusion is partial, or keeps the sitting posture, if both cavities are full. There is never any palpitations of the heart, its action being observed to be feeble, tranquil, and regular. In accordance with this state of the heart, the pulse is often full, soft, slow and regular: as the disease approaches towards its final close, it becomes more feeble and frequent, but still remains regular. At this time the urine becomes scanty and thick. The disease retains a sameness of course, and the termination has nothing remarkable, being generally without much suffering, and with the senses and mental faculties still preserved." 53.

From this description of primary simple hydrothorax it is evident how illusory and false are many of those histories of this disease, where, *starting from sleep—palpitation—præcor-*

dial distress—inability to lie down—irregular intermitting pulse, &c. are set down as pathognomonic symptoms—symptoms which clearly belong to an anterior organic disease of the heart or great arteries. Laennec also considers idiopathic hydrothorax as a comparatively rare disease—perhaps one in two thousand. This is a very small proportion. We never saw but one case, where no structural disease existed in any other organ. This was in a very robust young man, about 30 years of age, who laboured under cough without expectoration for some time, but did not emaciate, and continued going about his affairs up to the very day he died. He could lie perfectly horizontal, and even on both sides, but preferred lying on the right. He went to bed in his usual state, and was found quite dead in the morning. We had convinced ourselves by percussion that there was fluid in the right side; but had no idea of the extent of the effusion. Eleven pints of water, very little coloured, were taken from the right bag of the pleura—the lung of that side was not larger than a man's fist—the pleura itself was slightly opake and thickened—but we could find no structural disease in any part of the body. This was the first and the last case of idiopathic hydrothorax which we ever witnessed.

Dropsy of the Pericardium. Avenbrugger confounds the sero-purulent effusion into the pericardium, which is the effect of inflammation, with the colourless serous effusion, a morbid accumulation of the natural fluid. Corvisart, his commentator, properly restricts the term dropsy to the latter affection. This, like hydrothorax, is a very rare disease, as an *idiopathic affection*. It is generally accompanied, or rather preceded, by organic disease of the heart, lungs, or mediastinum.—This being the case, we shall not advert to the diagnostic symptoms of *primary* hydropericardium—a malady too rare to afford diagnostic symptoms of sufficient accuracy to be depended on.

Aneurism of the Heart. With this disease, now so common, Avenbrugger appears to have been totally unacquainted—a circumstance that proves how diseases, and whole classes of disease, rise at one time, and disappear at another. A man like Avenbrugger, who so carefully studied diseases of the chest, would not have overlooked a class of organic diseases (now so common, and indeed so generally recognised, that every tyro considers himself capable of detecting them,) if they had then existed—at least in the proportion they now do. We have no doubt, indeed, that the prevalence of cardiac diseases has arisen out of the moral and physical circum-

stances of modern times, and that thus the evils to which flesh is heir will every day vary with revolving æras, per omnia secula seculorum.

Here ends the translation of Avenbrugger's work and Corvisart's commentary on it. Several able and important notes have also been added by Dr. Forbes, to whom the medical literature of this country is undoubtedly under obligations for having clothed the whole in an English dress, and thus rendered it easy of access to the whole profession of these isles and their various dependencies.

Next follows a brief outline of the principals of *stethoscopy*, (if we are permitted the expression) or method of distinguishing diseases of the chest by means of mediate auscultation, extracted from the great work of Laennec, and nearly as it stands in Dr. Forbes's translation, now out of print. We were about to pass over this portion (only 16 pages) entirely, as having been before the public in Dr. Forbes's former work, for some time past; but then we consider that this journal must necessarily pass through numerous hands where the original work has not been—and consequently that many of the cases (afterwards to be analysed) would lose much of their interest, from want of some knowledge of auscultation. On this account we shall dedicate two or three pages to a still briefer abstract of the principles of the stethoscope, which can be no great disadvantage to the adepts in the science, while to the noviciates it may be of considerable service.

Auscultation, or listening to the sounds produced in the interior of the chest by the natural motions of the organs of respiration and circulation, is not a modern discovery.—Laennec has improved this diagnostic mean by the invention of the stethoscope or cylinder, which need not here be described. By practising with this instrument, we have no doubt that the sounds and movements from within are more distinctly conveyed to the ear, than when the naked ear is applied to the surface of the chest. But, as we before observed, simple auscultation is by no means a meagre substitute for mediate.

There are three kinds of exploration by the stethoscope;—that of the voice—the respiration—the circulation.

1. *Voice.* The action of speaking or singing, in health, excites a vibration through the whole parietes of the chest perceptible by the hand. This phenomenon ceases to exist where the lungs have become impermeable to air, or are removed from the parietes of the chest by the intervention of a fluid. But the utility of this sign is curtailed by a knowledge that numerous other causes modify or destroy it, as obesity,

anasarca of the integuments, &c. The places to which the stethoscope is applied with most advantage, are, the axillæ, the back, between the spine and scapula, and on the anterior and superior part of the chest, near the angle formed by the union of the clavicle with the sternum. When the stethoscope is applied to these points, the voice appears stronger and nearer to us than from the others. "If we apply the stethoscope to the larynx or trachea of a person in health, when speaking, we hear the voice of the individual as if coming directly from the point on which the instrument rests, and reaching our ear through the canal in it. In the second stage of phthisis, when tubercular excavations exist in the lungs, if the stethoscope be applied to the chest, over the site of one of these, the same transmission of voice through the tube is perceived. This phenomenon has been named *Pectoriloquism*: it is the pathognomonic sign of the morbid state just mentioned."

2. *Respiration.* The following cannot be condensed or abridged.

"On applying the cylinder, with its funnel-shaped cavity open, to the breast of a healthy person, we hear, during inspiration and expiration, a slight, but extremely distinct sound, answering to the entrance of the air into, and its expulsion from, the air cells of the lungs. This sound may be compared to that produced by a pair of bellows whose valve makes no noise, or, still better, to that emitted by a person in a deep and placid sleep, who makes now and then a profound inspiration.* We perceive this sound almost equally distinct in every part of the chest, but more particularly in those points where the lungs, in their dilatation, approach nearest to the thoracic parietes, as, for instance, the anterior-superior, the lateral, and the posterior-inferior regions. The hollow of the axilla, and the space between the clavicle and superior edge of the trapezius muscle, exhibit the phenomenon in its greatest intensity. It is equally perceptible on the larynx, on the exposed or cervical portion of the trachea, and, in many persons, through the whole tract of this canal to the bottom of the sternum; but on the trachea, and in some degree at the root of the bronchia, the respiratory sound has a peculiar character, which evidently indicates the transmission of the air through a larger space than the air cells. In this position, also, it often seems as if the patient, in inspiring, inhales the air through the tube of the stethoscope, and expels it by the same, during expiration." 71.

The room in which auscultation takes place, should, of course, be perfectly noiseless. Contrary to what obtains in ex-

* Its precise character will be best ascertained by applying the naked ear to the chest of a child."—*Trans.*

ploring the voice, the respiration is heard even where there is excessive fatness, or anasarca. The sound is more distinct, in proportion as the respiration is more frequent. In children respiration is far more sonorous than in adults.

"When we can distinctly perceive, and with a uniform intensity, the respiratory murmur in every part of the chest, we may be assured that there exists neither effusion into the cavity of the pleura, nor any species of engorgement in the substance of the lungs. On the other hand, when we find the respiration is not to be distinguished in any particular point, we may safely conclude that the corresponding portion of the lungs within, is become impermeable to the air from some cause or other. This sign is as easy to be perceived as the presence or absence of the sound, in the percussion of Avenbrugger, and affords precisely the same indications. With the exception of some peculiar cases, in which the simultaneous employment of the two different methods gives us signs which are completely pathognomic,—we may state it as a general fact, that the absence of the sound on percussion coincides uniformly with the absence of respiration, as ascertained by the stethoscope. Accordingly, this failure of respiration, existing in a greater or less degree, and over a greater or less extent of surface, is found to be a principal distinctive sign of Peripneumony, Pleurisy, Hydrothorax, and all other diseases, which in any way obstruct or impede the natural action of the lungs." 74.

There are several modifications of the natural respiratory sound, in consequence of its combination with other sounds in certain morbid states of the lungs, but these must be studied by the auscultator after he has made some progress in the art.

3. *The Circulation.* This is studied in relation to sound, impulse, and rythm.

"In ordinary circumstances, the stethoscope, applied between the cartilages of the fifth and sixth ribs, at the end of the sternum, &c. conveys to the ear a distinct sound, even where the pulse is very feeble, or imperceptible. This, in the healthy body, is double, and each beat of the arterial pulse corresponds to this double sound, in other words, to two sounds. One of these is clear and rapid, and somewhat resembles the sound produced by the valve of a pair of bellows: this corresponds to the systole of the auricles. The other is more dull and prolonged, coinciding with the beat of the pulse and with the shock or impulse communicated to the parietes of the chest by the motion of the heart:—it indicates the contraction of the ventricles. The sounds heard at the end of the sternum are produced by the action of the right side of the heart; those between the cartilages of the ribs by the left cavities. In the state of health the sound produced by the contractions of each side is the same." 76.

This sound is great in proportion as the parietes of the ventricles are thin and their impulse feeble—consequently it does not arise from percussion of this organ against the side. In a moderate degree of hypertrophy, or thickening of the heart's substance, the ventricular contractions produce only a dull sound, like the murmur of respiration:—in a high degree of hypertrophy, the contraction of the ventricles yields merely a shock without any sound. On the other hand, when the ventricular parietes are thin, the noise produced by their contracting is clear and loud, approaching to that of the auricles. In health and good proportion, the sound of the heart is only heard in the cardiac region—in thin persons and children, however, it is more extended. When the cardiac pulsations are heard beyond the region in question, the individual is seldom in good health. If he have no formal dyspnœa, he has, at least, shorter respiration than natural, is easily put out of breath, and is subject to palpitation. This state, however, which is that of many asthmatics, may remain stationary many years, and does not always prevent the attainment of old age. It may be taken as a general fact, that the extent of sound is in the direct ratio of the thinness and weakness of the heart, and, consequently, inversely as its thickness and strength.

Impulse. The degree of this is, in general, inversely as the extent of *pulsation*, and directly as the thickness of the walls of the ventricles.

"In a person whose organs of circulation are well proportioned, this impulse is very little perceptible, often quite imperceptible, especially if the individual is rather fat. When the parietes of the heart are unnaturally thick, the impulse is usually so great as very sensibly to elevate the head of the observer, and sometimes to give a disagreeable shock to the ear. The more intense the hypertrophia, the longer time the impulse is perceptible. When the disease exists in a high degree, we feel as if the heart, in dilating, first comes in contact with the thoracic parietes in one point only, and then with its whole surface, and that it contracts and falls back all at once. The impulse of the heart is only felt during the systole of the ventricles; or if, in some rare cases, an analagous phenomenon accompanies the contraction of the auricles, this is easily distinguished from the former. In fact, when the systole of the auricles is attended by any sensible impulse, this is perceived to have its seat much deeper; and most commonly it consists merely of a sort of vibration. In any case, it is very little marked as compared with the sensation produced by the contraction of the ventricles, when these are of a good degree of thickness.

"When the parietes of the heart are thinner than usual, no impulse is communicated, even when the sound is the greatest; and,

in this case, the alternate contraction of its cavities is only distinguished by the sound these produce. A strong impulse, therefore, must be regarded as the chief sign of hypertrophia; and the absence of all impulse as the characteristic of dilatation of the heart. 80."

The subject of the rythm of the heart's action, or the ratio between the action of the different chambers of that organ, must be an ulterior study, and not detain us here.

This slight sketch may seem unnecessary to the few who have studied the subject; but as not one in ten of our readers are auscultators, the little we have laid before them may possibly stimulate to further inquiry, in which case our object is fulfilled.

We now come to the cases and dissections furnished by Dr. Forbes himself, being thirty nine in number, and occupying nearly 200 closely printed pages. They are principally dispensary cases, and consequently of the most authentic class. This part of the volume indeed is extremely valuable, and is highly creditable to the zeal, the talent, and the candour of the author. If Dr. Forbes persists in the laudable and industrious course which he is now pursuing, he will not only be the architect of fame and fortune for himself, but prove a benefactor to humanity and an honour to the profession. We can select but a very few of these interesting cases for specimens or illustrations in this article—but we hope the work itself will circulate wherever the English language prevails. We shall confine ourselves principally to cases where dissection proved the truth or error of diagnosis and prognosis.

Case 1.—G. R. a blacksmith, aged 30 years, had been ill about five months, the principal symptoms being pain in the præcordia, indigestion, dyspnœa, palpitation, inability to lie in the horizontal posture, disturbed sleep—and latterly, cough with mucous expectoration. The pulse is extremely full, strong, and vibrating—the action of the heart great, and occasions an obvious tremor of the head. Examined by the stethoscope, though slightly and imperfectly, the diagnosis was hypertrophy of the heart with enlargement of the ventricles. "The action of the heart perceptible over the whole anterior part of the chest: the *impulse* very great, and the sound very loud and peculiar." Bleeding gave great relief, with mercurial purgatives, and digitalis: but the cardiac symptoms made progress. About three months afterwards, he was again examined by the stethescope, and this examination we shall give in the author's own words.

"August 11th and 15th. Examined with the stethoscope more particularly. *Impulse* of the heart's action is very great in the region of the heart, and is very perceptible, though in a less degree, to a considerable distance beyond, viz. under the right clavicle, and over the greater part of the anterior of the chest: the *sound* of the heart's action is very loud in the region of the heart, and is very distinctly perceptible over the whole chest, before and behind, except on the lower part of the right side; it is, however, much louder over part of the right side, especially under the clavicle and along the whole extent of the sternum, than either in the region of the heart, or over the left side. The sound is much more perceptible when the stopper of the instrument is removed; it is thus heard to be extremely loud under the right clavicle, and at the top of the sternum, and resembling the grating noise of a saw with fine teeth, or that produced by the forcible action of the piston in a large empty syringe.* It is much louder under the right clavicle than the left; and it is also heard very distinctly *above* the clavicles. In the action of the heart, as studied by the stethescope, the sonorous contraction of the ventricle seems to occupy by far the greatest part of the whole space of time,—the contraction of the auricles, and the subsequent interval of repose, being extremely brief. The impulse or shock of the heart's action is not synchronous with the pulse of the radial arteries. I am not sure that there is either swelling or pulsation of the jugulars; but there is a very perceptible tremulous motion of the whole throat, connected with the pulsatile tremor of the head formerly noticed. Applied over the carotids, the stethoscope conveys a very loud sound, especially on the right side, on which the pulsation is much stronger, and accompanied by a jarring vibratory sensation scarcely perceptible on the other. The whole thorax in the region of the heart is very painful on pressure.

"The sound of *respiration* is very indistinct over the whole chest, being drowned, probably, by the very loud sound of the heart. *Percussion* elicits a very dull sound in the region of the heart, and to some distance around; but over the rest of the chest, the sound is natural. Pulse 100, regular, full and strong, but less strong than formerly.

"The swelling in the præcordia is equable, and conveys the idea of a large solid body, like the liver, being suspended there, and hanging down nearly as low as the umbilicus: it seems to extend as far on the left side as the right, and is painful on pressure.

"DIAGNOSIS. *Great dilatation of the right ventricle with slight hypertrophia; and moderate dilatation of the left ventricle with very considerable hypertrophia:* In other words:—*Dilatation of both ventricles,—greatest of the right; Hypertrophia of both ventricles,—greatest of the left. Dilatation of the Aorta? Great enlargement of the left lobe of the liver.*" 87.

"* I noted down these comparisons at the time (as well as every other statement in the case), but in summing up my diagnosis, it will be seen that I neglected to draw from them some very obvious conclusions, respecting the state of the valves of the heart."

The prognosis was, of course, DEATH. This event took place two months afterwards, preceded by that dreadful state of suffering, which characterizes this most melancholy class of human afflictions.

"Totally incapable of bearing the horizontal posture, he remained, day and night, seated, generally in his chair, sometimes on his bed; with the constant sense of the most distressing uneasiness, and occasionally of the most acute pain, in the region of the heart, —almost entirely deprived of sleep, not daring to move for fear of inducing a paroxysm of pain and palpitation,—and anasarcous over the greater part of the body. His only relief was from blood-letting; and this was very frequently repeated. He took a variety of medicines, partly in hopes of relieving the original disease of the heart and liver, partly with the intention of removing some of the consequences of this,—the anasarca, the pain, and sleeplessness; but with very little benefit, except from blood-letting." 88.

Dissection. Present, Mr. W. Guy, Dr. Conolly, Mr. Tully, and Dr. Forbes. The note of the diagnosis was read to these gentlemen, before the body was opened. Pericardium sound, and very little fluid in its cavity. The heart itself enormously enlarged. The parietes of the *right* ventricle were from three eighths of an inch to half an inch in thickness, and uniformly so. The cavity of the ventricle was capable of containing a large-sized lemon. The *right* auricle was enlarged in proportion. The cavity of the *left* ventricle was smaller than that of the right by nearly one third —and the parietes an inch in thickness. The mitral valve was sound. The aorta was hard, and somewhat contracted at its origin; but beyond that, considerably dilated as high as the arteria innominata. The semilunar valves of the aorta were much thickened, hard, and rough. These and the interior of the vessel were encrusted with osseous deposits. The pulmonary artery and valves escaped notice. The whole substance of the lungs, especially on the right side, exhibited the characteristic induration of peripneumony in a slight degree. The inferior lobe on the right side was *hepatized*. The liver was greatly enlarged, particularly the left lobe. Its substance was harder than natural, and of a mottled appearance.

Case 2.—A hard working labourer applied to the dispensary on the 8th of April, 1823. He had been seized rather suddenly three months previously with oppression and tightness across the chest, dyspnœa, &c. accompanied by irregular pulse. He has not been able to work since. It comes on in paroxysms, but is never entirely absent. The legs are now œdematous.

"STETHESCOPE. *Impulse* of the heart, in the cardiac region, very great, sound also louder than natural in the same place, and audible over the whole chest, before and behind, and especially along the *right* side of the sternum. On the back, the sound (ow-

ing to the frequency of the heart's contraction) is rather that of a continuous murmur, than of distinct pulsations. With the exception of irregularity of the rythm, there is no other peculiarity in the sound. *Respiration* natural. To this note of examination, I added the following DIAGNOSIS and PROGNOSIS: *Dilatation with Hypertrophia of the heart; dilatation especially of the right cavities. Death.*" 97.

Dr. Forbes directed the loss of some blood, and some aperient medicine. In about a fortnight the man's daughter came for his discharge, informing our author that her father had been at work ever since! This information was not a little startling to Dr. Forbes, who began to look over his notes, somewhat distrusting the fidelity of "son cylindre" and its diagnosis, as well as his own prognosis. But a few more days proved the correctness of both. The man was suddenly seized with one of the paroxysms, while sawing a piece of wood in his garden, and in twenty-four hours expired. Previously to examination, and in the presence of several medical gentlemen, Dr. Forbes voluntarily committed himself and the credit of the instrument by the following written statement of his expectations.—"*Whole heart enlarged—principal dilatation of the right ventricle. No contraction of valvular orifices. Lungs sound.*"

Dissection.—Present, Mr. Guy, Mr. Dods, Dr. Forbes. All the viscera of the thorax and abdomen, except the heart, particularly sound. The heart itself was about two-thirds larger than natural, the greatest dilatation being in the right ventricle and auricle. There were no marks of inflammation—no valvular disease.

This case shows the importance of auscultation, and affords an example of the delusive gleams of hope which sometimes break in upon diseases of the heart, only to render the subsequent disappointment more poignant.

Dr. Forbes makes some judicious observations at the close of the above case, one of which we shall quote, as highly deserving the attention of the young.

"As bearing directly upon the present subject, I would here beg to suggest a most important caution in the use of the stethoscope in diseases, or supposed diseases, of the heart. It is—never to overlook the precept of Laennec, not to explore the circulation, unless during the most perfect state of quietude, both bodily and mental, of the patient. "*We must never deduce any conclusions from the analysis of the heart's pulsations, unless this has been made after a sufficiently long repose, if the patient has been taking exercise; or during the most perfect calm and quietude, if he already labours under disease of the heart.*" (Tom. II. p. 228). I am the more anxious to impress this caution on the mind of the reader, as it is of especial importance in Dispensary practice, where patients generally walk to the place of examination, and where trials

with the stethoscope are more likely to be made than in private practice. I am conscious of having, more than once, committed serious mistakes, from inattention to this circumstance: and I shall, in the present volume, record one or two instances of the kind, with the view of impressing it more deeply on the attention of the young Auscultator." 101.

Case 3.—A man, 40 years of age, a German by birth, was admitted a patient in the Chichester Infirmary, under Dr. Connolly, in February 1823. He had long been suffering from some disease of the chest, attended with such a violent cough as to be an annoyance to the neighbourhood. There was also purulent expectoration. Dr. F. first visited him in March 1823, at which time he was confined to bed, and in a great measure incapable of swallowing from some obstruction. Examined with the stethoscope on the 23d March, the following note was made.

"*Action* of the heart regular; *impulse* considerable in the region of the heart; *sound* louder than natural in the same place and as low down as the angle of the short ribs, also towards the sternum; most audible with the open stethoscope; both the sound and *impulse* perceptible at the very extremity of the xiphoid; *sound* perceptible over all the right side (anteriorly) but not very loud,—more so in the middle than under the clavicle; about the nipple (right) and below it, there seems to be *impulse* as well as sound. *Respiration* audible over the greater part of the *left* side (anteriorly); attended, in the vicinity of the heart and under the clavicle, with a dry sonorous rattle, very loud; *puerile* under the clavicle, and extremely puerile and without any rattle, under the sternal extremities of the 2nd and 3rd ribs; very indistinct over all the right side, yet still in some degree perceptible in most places, and, where perceptible, accompanied by a slight crepitous rattle. Pectoriloquism not explored, except under the left clavicle, where it is wanting." 134.

This was three weeks previously to the patient's death, and upon looking over it before opening the body, the following diagnosis was committed to paper, and shown to the medical gentlemen who assisted in the dissection.

"Steinicke. *Dilatation with Hypertrophia (slight), especially of the right ventricle: heart otherwise natural? Left lung sound, especially in the superior lobe. Inflammation and consequent consolidation (in a considerable degree) of the greater part of the right lung. Larynx or Trachea diseased, and affecting the œsophagus?*"

Dissection.—Right lung adherent in every point to the parietes of the cavity—its substance hepatized and tuberculated. In the posterior part of the upper lobe there was a vast hollow abscess capable of containing an orange. The *left* lung was partially adherent, but was crepitous, with partial indurations

and softened tubercles. The *heart* was of natural size, but adherent to the pericardium in every point, without any obvious intermediate tissue. The right ventricle and auricle were sound; and so were the left, except some ossified columnæ carneæ on this side. A large tumour consisting of a congeries of indurated glands, was found under the upper part of the sternum in the posterior mediastinum, between the aorta and bifurcation of the trachea, compressing the œsophagus. The liver was sound, but descended lower than usual. Other viscera natural.

It will be perceived that the diagnosis respecting the lungs was perfectly correct, while that which regarded the heart was erroneous. The error, however, is pardonable, when we come to consider the adhesion of the heart to the pericardium, which gave to its action that impulsion which led our author to conclude that hypertrophy had taken place. There is, in fact, no certain diagnostic mark laid down even by Laennec, for pericardiac adhesion. In all the instances which we have seen there was violent action of the heart—but this is common to many other affections of the same organ.

Case 4.—Mr. N——, aged 40, had all his life been subject to constipation, heart-burn, head-ache, and other symptoms of indigestion; but was nevertheless strong and hearty till within two years of the above age. He then began to have occasional fits of breathlessness and palpitation, especially on ascending any eminence, which symptom progressively increased till the time of consultation, December 9th, 1822. There is sense of fulness and of oppression in the region of the heart. Since the thoracic symptoms have appeared, he has, in a great measure, lost his head-ache and heart-burn, but the bowels continue obstinately costive, and he has some nausea and retching. He has also become subject to very severe cough, mostly dry, but latterly with mucous expectoration, tinged at times with blood. He can take a deep inspiration without difficulty, and has no pain in any part of the chest, except during the paroxysms of great dyspnœa accompanied by palpitation. He has been occasionally jaundiced. His urine is now scanty, high-colored, and lateritious. He has been unfortunate in business and suffered great mental distress. He is now very low-spirited. On examination, a swelling and hardness, answering to the left lobe of the liver, were observable in the præcordia. On percussion, the chest sounded well in every part, except in the region of the heart, where the sound is very dull over a considerable space. Not examined with the stethoscope. Bleeding to 16 ounces gave

great and immediate relief. The pulse is above 100, small and regular. Tongue pretty clear—stools very dark—sickness and retching distressing. Topical bleedings from the præcordia—blistering—mercurial frictions—gentle tonic aperients and alteratives. From this treatment he derived great relief. The sickness and retching vanished, and the other symptoms were much ameliorated. A few days after the first examination the stethoscope was applied, with the following results: the respiratory sound is quite wanting on the *left side* from below the 3d or 4th rib, to the bottom of the thorax, over a space bounded by the rib abovementioned, the sternum on the right, and a line drawn about an inch outside the nipple on the left—in other words, over a space as much as a spread hand could cover, the heart being the centre. Over the remainder of this side the respiration was indistinct. Over the *right* side of the chest it was very distinct. The sound of the heart's contractions was very loud over all the space where the respiration was indistinct. It is also distinct, though not loud, over the rest of the left side. From these and other phenomena, Dr. Forbes ventured to prognosticate, "*considerable dilatation of the heart, with moderate hypertrophia.*" The lungs he considered as sound, and no hydrothorax at that time.

7 *January.* The symptoms worse—more dyspnœa—anasarca of the limbs—considerable impulsion of the heart—pulse 120, and small. Infusion of digitalis brought on a plentiful diuresis, with diminution of the external swellings, and great relief of the dyspnœa and uneasy feelings in the chest. But the relief, as usual, was only temporary, and superseded by a new evil—extensive erysipelas of the right leg, terminating in sphacelus. Stimulants were now, of course, administered—the pectoral symptoms were relieved—the sphacelation was arrested—and the slough separated. Cicatrization had nearly been effected, when the pectoral symptoms returned in an aggravated degree, and continued to progressively increase in violence to the fatal close. In this melancholy progress the stethoscope detected hepatization of the superior lobe of the right lung, in addition to hypertrophy of the heart. He died on the 14th April, after a long series of dreadful sufferings.

Dissection.—Liver very large—of a dark mottled colour externally, somewhat rough, but not otherwise diseased. Its substance was more solid than natural, and of a pale colour. It was much gorged with blood—many gall-stones in the gall-bladder. On removing the sternum and cartilaginous ends of the ribs, the whole space exposed was found to be occupied by the pericardium (no part of the lungs being visible) dis-

tended with fluid, of a sero-purulent character, and upwards of a *quart in quantity!* The whole internal surface of the pericardium was covered with a layer of white curd-like substance, of a frosted appearance, and the product, unquestionably, of inflammation. Here were seen those sacculated compartments resembling the stomach of the calf, produced by the crossing of bands of the adventitious membrane from side to side of the distended sac. On the left side of the heart there was a mass of tremulous jelly, hanging in folds, half an inch thick in some places. The membrane underneath was very red, not uniformly, but in patches. The heart itself was probably one half larger than natural. The parietes were not increased or decreased in thickness. The valves were all sound. The *right* lung was adherent to the ribs in different points—much compressed and displaced by the distended pericardium, but still crepitous. The lower part of the *left* lung was compressed and hepatized. In this side of the chest there was about a quart of sero-purulent fluid, of the same kind as that in the pericardium. For Dr. Forbes's remarks on the above case, we must refer to the volume itself.

Case 5.—The following case cannot be abridged without injury, and is moreover very short. We give it as a specimen of functional, imitating organic disease—especially in females. Few days pass that we do not see shades, lighter or deeper, of the same—and great error committed in the prognosis as well as treatment.

"*Sympathetic Angina Pectoris.*"

"*August* 12, 1822. Miss ————, ætat. 43. This patient, a lady of a cultivated intellect and sensitive temperament, describes herself as having been always a bilious subject, yet pretty strong and active, and in the habit of taking occasionally great bodily exercise. About two years ago she began to be affected with dyspnœa on going up stairs. This affection gradually increased, and, after a short time, was excited by the slightest motion. In the course of a few months, in addition to the dyspnœa, a violent paroxysm of pain under the sternum, shooting to the back and down both arms,—in short a paroxysm of *angina pectoris*,—was produced by almost every attempt at motion. This state of things has continued to the present time, or rather seems to have been progressively getting worse. *Now*, she cannot walk across the room, or dress herself, or indeed use any kind of bodily movement, without bringing on the paroxysm. She is also subject to frequent palpitation, even when at rest, and to a constant and most distressing noise in the ears. But for these two last named symptoms she feels tolerably well, when lying still. She has no permanent dyspnœa whatever, nor pain, nor stricture of the chest, and never

appears to have been affected with any acute inflammation of any of the thoracic vicera. She is never hot or feverish, although her skin, she says, is always dry. She can lie indifferently on either side or on the back, and with the head low, and her sleep is undisturbed by frightful dreams or sudden startings, but broken, after intervals of a few hours, by an attack of palpitation. There is no indigestion properly so called, but the bowels are torpid, and the appetite impaired. The catamenia are regular. She has been for four years subject to a considerable discharge from the hæmorrhoidal veins, coming on regularly after every menstrual lustration: this discharge has not been present for six weeks. Pulse 90, quite regular and of moderate strength. Tongue clean. Urine of natural quantity.

"I applied the stethoscope twice in this case. At my first visit, the sound and impulse of the heart were found moderate in the region of the heart, but the former audible under the right clavicle. [At this time the patient was somewhat agitated]. At my second visit, on the 23rd, she having remained perfectly still and in the recumbent posture, by my recommendation, the action of the heart was found perfectly natural, both in rythm, impulse, and extent of pulsation. The respiration also was found to be natural.

"Considering this case as one in which the affection of the heart was most probably nervous or sympathetic, or in which the organic derangement, if any, was but slight,—after ordering a few oz. of blood to be taken away as an experiment (and the loss of which was not beneficial), I enjoined absolute rest in bed, and prescribed the following mild alterative pill and draught, with the view of improving the digestive powers and the intestinal functions:—Pil. Hyd. Ext. Col. c Ext. Hyoscyami aa gr. j. Ipec: Pulv: gr. ½ M. ft. pil. ter quotidie sumenda. Haust. merid. ex infus. Rhei, infus: Calumbæ aa dr. vj. Spirit. Myrist. dr. ss.

"This plan semed to be productive of great benefit, as the appetite and strength improved, and the paroxysms gradually disappeared under its continued use. It was necessary, however, for the patient to confine herself for many months. She has been now (Nov. 1823) for more than half a year comparatively well.

"May 1824. She still remains comparatively well, occasionally subject to slight palpitation, but never to any of the severe paroxysms of angina." 177.

We agree with Dr. Forbes in considering the above case as an example of "the first stage of a numerous class of organic diseases of the heart, namely, disordered action of the heart, arising in bilious and nervous subjects, and proceeding, if unchecked, to irremediable disorganization." We are quite certain, however, from repeated observation, that this "first stage," if it can strictly be called so, will often go on for years without any material change of structure—at least irremediable change, and ultimately disappear altogether.—Still this disorder of function occasionally runs quickly into alteration of structure, and therefore should never be treated

lightly, or neglected. In these cases, the examinations by the stethoscope, percussion, &c. are very useful, as furnishing *negative* results, and satisfying the practitioner of the absence of organic disease.

We have said that Dr. Forbes was a candid as well as a talented physician. There is indeed a tone of ingenuous candour pervading the whole work which charms—and must ever charm. We shall offer a proof.

Case 6.—James Waller, ætat. 23, applied for dispensary assistance on the 23d of May, 1823. He had been very strong and healthy (being a day-labourer) until the preceding October, at which time he fell, with a heavy sack of wheat on his back, pitching with his *left* breast on the sill of a door, with a shock of extreme violence, followed by extreme pain in the chest, and instantaneous discharge of blood from the lungs, which continued for some days. The pain went off in a few days, but was followed by dyspnœa and swellings of the legs.

"This dyspnœa was at first severe, and, for several months, constant, whether quiet or not; latterly it has been less, and little urgent or indeed perceptible except on motion. He continued at work for two months after the accident, but was then obliged to desist on account of a return of the spitting of blood and a severe pain in his *right* side. This pain went off after about a month's continuance, and he was thinking of returning to his labour, when he was suddenly seized with a most violent pain in the region of the heart, attended by excessive palpitations. *This* pain lasted, also, about a month, and then went off; but the palpitations have never subsided. During the first fortnight after the sudden attack of pain in the region of the heart, he was altogether unable to lie down; but previously to that period, and since, and *now*, he can lie down with his head as low as when in health, and with equal facility on either side; and he sleeps very soundly, without dreaming or alarm. Ever since this attack in the left side, *stooping* produces vertigo, and a state which he compares to the effect of intoxicating liquors. All kinds of bodily exertion, such as walking, and especially going up hill, increase the palpitation or habitual state of over-action of the heart, and augment the feelings of distress constantly referable to that spot. His appetite and bowels are regular. His mind is evidently very considerably depressed, and he says his thoughts are confused.

"The pulsation of the heart is *seen* very distinctly over the left side of the chest; the impulse is felt by the hand to be very great, and very perceptible across the lower half of the sternum as far as the right nipple. The carotids are also seen and felt beating very strongly all along the neck. The pulse at the wrist is not very full, but very strong and regular, about 100.

"STETHOSCOPE. *Impulse* of the heart is extremely great in the cardiac region, so as to convey a strong shock to the head, through the instrument; but there is very *little sound*. The impulse is

synchronous with the pulse; and there is scarcely any shock or sound to be perceived answering to the contraction of the auricles. The impulse or shock, without sound, is strongest in the line of the nipple, and four or five inches below it. Under the middle of the left clavicle there is a very distinct and loud sound (with very slight impulse) resembling a hollow murmur, and almost *single*;—that is, there is only one action or sound, answering to the contraction of the ventricles (the pulse). Over the left axillary face, the sound is very loud, and is not so much a grating intermitting noise, as a regular, continuous, hollow tone; a similar sound is very distinct a little way to the left of the nipple, on this side. Sound and impulse very distinct over the lower half of the sternum; and the *sound* very loud over all the right side anteriorly, and without any grating or roughness; perceptible, also, over all the back, on both sides, but much less loudly than anteriorly.

"*Respiration* not much explored,—audible on the back, but drowned before by the loudness of the sound of the heart's contractions. *Percussion* does not give pain in the region of the heart, but does under the right nipple, over the site of the pain formerly experienced there. He is constantly sensible of a great and very disagreeable sound in his ears: which I found, on trial, to be greatly and instantly relieved by compression of the carotids. The præcordia and right hypochondriac region appear to be very full.

"His complexion is still very fresh and pinky; but he says he is much paler than when in health.

"Diagnosis. Hypertrophia with Dilatation of the Heart—in a great degree, without valvular disease. Hypertrophia principally of the left ventricle? Hypertrophia with dilatation of the right? Prognosis. Death." 189.

On the 2d of January, 1824, or seven months after the fatal sentence was pronounced, Dr. Forbes was somewhat astonished to meet his patient, who informed him, he had been following his labours, as a man servant, for the last five months —having returned to work about two months after Dr. F. saw him! He was, of course, greatly amended, though not quite well. Hard labour still excited palpitation and dyspnœa. The rythm of the heart was now regular, and the impulse not much above par. The sound, however, was still loud under the sternum, and over the right side. Upon being questioned, the man now admitted that he had been under a considerable degree of mental agitation during the former examination, although he denied it at *that* time. He had also walked to the Dispensary, which had increased the action of the heart. This case offers an instructive example of the errors which may be committed by forming a diagnosis or prognosis in cardiac diseases from a single examination, and that at a time when the function of the organ is disturbed by any mental emotion. Dr. Forbes candidly confesses that he

mistook a transient excitation for an habitual condition, and was thus led into an erroneous, or at all events, an exaggerated diagnosis and prognosis. Still he is inclined to think (we hope he is mistaken) that the error was not in *kind* but only in *degree*. Time alone can solve this point, and Dr. F. promises to disclose the result to the public, whatever way it turns out.

Case 7. *June* 3*d*, 1823.—John Parsons, ætat. 45, a farmer's servant, has been affected about a month with various ailments of which he can give but a very imperfect account. He seems to have much dyspnœa, and has a very anxious countenance; complains of pain in the præcordia, where there is tenderness on pressure. Urine high-coloured—tongue furred—pulse 80 to 90. He was bled, and had aperients with diuretics. He received little or no benefit from the treatment adopted, and on the 19th of July, Dr. F. examined him with the stethoscope. The sound of the heart was natural, with little or no impulse. Over the whole of the right side of the chest the respiratory sound was almost entirely inaudible. Percussion is in accordance with the stethoscope, and elicits only a very dull sound, while on the opposite side the sound is clear. When first taken ill he could lie on his back—after a time he rested chiefly on the *right* side—now, he can lie equally well on either side, on the back, and also with the head low. He does not start from sleep. His urine is high-coloured, but of natural quantity. DIAGNOSIS. "*Chronic pleurisy, with copious effusion, in the right side.*"

Between this and the 27th October he rather mended than otherwise. It was then discovered that *contraction of the right side of the chest* had taken place to a very considerable extent, the whole trunk being swayed to that side, and the left shoulder being much higher than the right.

In the trials of percussion and mediate auscultation, the contracted side still sounds perfectly dull. *November* 25*th*. Has continued slowly to improve; but complains of slight pain in the lower part of the right side. His breath is pretty good, and he has no cough. *December* 19*th*. Still better—gains flesh and strength. The contraction of the right side is increased. Respiration is now heard in the upper part of the affected side, but not below the line of the nipple. *April* 2*nd*. Has had pain, with dyspnœa. Bled and blistered. 7th. Great dyspnœa—expectoration of thick mucus mixed with blood—pulse 120, small and feeble—urine very scanty. *Diagnosis*. "Supervention of acute peripneumony on both

sides." Venesection—blisters—antimony, &c. He died on the 10th, but unfortunately permission was not obtained to examine the body. There can be no doubt, however, of the existence, in this case, of chronic pleurisy, with effusion, partial absorption, and contraction of the chest on that side. It is probable, too, that the case would have ended favourably, as some of Laennec's did, had it not been for the accidental supervention of acute inflammation, of which, and not of the original disease, he evidently died. Another case of contraction of the chest, with chronic pleurisy, is next related by Dr. Forbes, and the event was still doubtful when his work went to press. From these and other cases which he has seen, he is led to be surprised at Mr. Shaw's scepticism respecting Laennec's statements on this point of morbid anatomy.

Case 8. *January 22nd*, 1824. Mrs. E——, ætat. 53, has been subject, for several winters past, to some cough, but was still able to attend to her affairs until six months ago, when she was attacked with inflammation of the chest that required bleeding repeatedly. Since that period she has been ailing, and during the last two months she has been much worse. She has paroxysms of violent cough, with scanty expectoration of white viscid mucus, occasionally tinged with blood—no pain of chest, but a slight pain about the larynx on taking a deep breath. There is dyspnœa when any bodily exertion is used—pulse nearly natural, as are the bowels and appetite. She cannot lie on the *right side*, and, on examination, this side of the chest, under the clavicle, seems more compressed than the other.

"On applying *Percussion*, the difference of sound on the two sides was so very great, as to be, at once, spontaneously remarked by the patient herself, and the by-standers, at the time;—the sound of the left side being very clear, and that of the right quite dull,—indeed *fleshy*. The *Stethoscope* gives analagous results,—the respiration on the *left* side being very loud, indeed puerile, and only just barely perceptible on the right. There is no *rattle*. *Hœgophonism* appeared to me distinct on the right side;—at least there is a kind of *punchinello-note* very audible on this side and not at all on the other.

"Diagnosis. *Chronic Pleurisy, with copious effusion, of the right side.*" 248.

A strict vegetable diet was recommended; leeches and a blister to the right side; an aperient emulsion.

March 8th. She has lost flesh; the pulse is up to 110; can still lie only on the left side. Same results from the stethoscope and percussion. *Prognosis.* "Death within the

year." *May 11th.* Appears to be gradually losing ground. She has returned to animal diet and dismissed her medical attendant. *June 24th.* Considerably worse; has lost much flesh and strength. She remains for the most part, sitting in bed, as any attempt to assume the horizontal posture or walk, aggravates the dyspnœa and cough. Sleeps badly, and awakes frightened. The cough is severe in paroxysms, and the expectoration still pure frothy mucus, occasionally tinged with blood. The dyspnœa is constant; no pain in the chest, but general uneasiness in her limbs; she is pallid; skin cool; perspires copiously at times, especially about the chest; pulse 108, and weak; appetite bad; tongue, bowels, urine natural; legs slightly œdamatous. Same results as formerly with the stethoscope and percussion. *July 4th.* Died this morning, the symptoms having progressively increased.

Dissection—in presence of Mess. Williams, Tully, Hills, and the Author. Percussion of the chest still elicited the dull sound on the *right*, and natural sound on the *left* side. A scalpel being pushed into the right side of the chest, a stream of dark yellow serum issued forth. The right side was completely filled with the same kind of fluid, three pints in quantity—the right lung was compressed on all sides towards its root in the mediastinum, into a compact rounded body, like a couple of closed fists. Its substance was harder than sound liver, and closely resembles what is termed scirrhous liver. It sunk in water. The whole of the pleura on this side had lost its natural character, being white, and without the glossy lustre of a serous membrane. It was also rough and uneven to the touch, apparently owing to a sort of fibrous, or cartilaginous degeneration. The membrane was, upon the whole, three or four times its natural thickness. There was no mark of *recent* inflammation. The *left* side contained about half a pint of serum, but the lung and pleura were nearly sound. The heart was flaccid, but of natural size. No other morbid appearance.

Dr. Forbes thinks (and we quite agree with him) that, in the above case, the disease of the pleura (whatever was its nature) and the consequent effusion, were the primary affections—the compression and hepatization of the lung being secondary. The correctness of the diagnosis furnished by auscultation and percussion is sufficiently obvious.

Here Dr. Forbes makes some observations on the subject of removing the fluid from the chest by means of a surgical operation, in cases of hydrothorax and chronic pleurisy. He had before remarked that the adhesions which exist in many cases of chronic pleurisy would render the operation nugatory, if not dangerous, and so would disease to any extent, in the lungs.

"When, however, the accumulation of fluid is copious, and the disease of not very long standing, and if there is good reason for believing the lungs not to be primarily affected, I presume that the operation is not only justifiable, but even very advisable, in many cases." 257.

This operation is of very ancient date, as may be seen in Sprengel's History of Medicine ("*De l'Operation de l'Empyème*," *vol.* ix. *p.* 1 *to* 90.) and has been practised or recommended by numerous writers, from the time of Hippocrates downwards, including Avenbrugger himself. The disuse of paracentesis thoracis, in this country, is thought by our author to result, in part at least, from overlooking chronic pleurisy—the usual form of empyema. From this, he does not mean to advocate the practice generally, but only thinks it would be well not to lose sight of it altogether, since it is a measure which has been reported as often successful, and that too in a disease which is generally, if not always, beyond the power of medicine. The following are Laennec's sentiments on this point.

"With regard to the operation itself, I am of opinion that it is one of much less severity than is usually imagined. Its success depends less on the condition of the pleura, than on that of the lungs; and when this viscus is not too deeply affected by numerous tubercles, or by a large gangrenous eschar, it ought almost always to succeed. The admission of air into the cavity of the pleura is probably, also, less dangerous than is commonly believed. This is, indeed, proved by the cases of wounds of the thorax, and the history of recoveries after the operation of empyema.

"I have not met with any example of acute inflammation of the pleura supervening to the operation; and I am not even sure whether the supervention of such an inflammation might not be the means of a speedy and certain cure of the disease, by producing an union between the lungs and ribs. At all events, in cases where the severity of the symptoms presented little hope of a cure from the operation, some benefit, and no danger, might result from simply puncturing the chest. Perhaps, even, it might be useful to draw off the fluids in this manner in all cases of chronic pleurisy, repeating if necessary, the puncture, five or six times. This slight operation would be attended with no inconvenience, and the puncture will heal up immediately." 259.

We have now, we hope, presented our readers with sufficient samples of the work before us to enable them to form a tolerably good estimate of its merits and importance. We think indeed that few will peruse this article and fail to place the original work in their library, for reference and study. If they do not, they injure themselves more than they injure the author. Dr. Forbes has added an appendix, containing

an admirable epitome of a little work by Dr. Collin, on exploration of the chest by percussion, auscultation, &c. lately published in Paris. It is avowedly a compilation, and only contains what is to be found in the works of Corvisart, Avenbrugger, and Landré-Beauvais. It is not necessary, therefore, that we should take any farther notice of it in this place. We part from Dr. Forbes with sentiments of respectful esteem.

VI.

Observations on the Pathology of Scrofulous Diseases, with a View to their Prevention. By W. P. ALISON, M.D. joint Professor of the Theory of Medicine in the University of Edinburgh.

[Ed. Med. Chir. Transactions, Vol. I.]

THE wide diffusion and untractable nature of scrofulous diseases, together with the discrepancies of opinion respecting their treatment, render any inquiries which promise to elucidate their etiology or pathology, most interesting to the practitioner. Whether the present essay of the learned professor shall "give additional precision and confidence to our notions of the means of preventing them," must be decided by the reader himself, when he has perused the original document or the analysis which we here present him.

As a preliminary step, Dr. Alison notices the erroneous *systematic* doctrine that phthisis pulmonalis is generally confined to the period intervening between 15 and 35. Every practitioner must be in the daily habit of seeing this fatal scourge pervade all ranks and all ages—the *latter* in pretty uniform proportion from youth to senectitude. Dr. Alison, however, thinks that there is a material difference, in general, between the phthisis occurring below 35, and that which occurs in later periods of life—not so much in symptoms as in the intimate pathology of the disease. In the lower orders of society it is found that there is a greater frequency of phthisis beyond the age of 40, than between puberty and the age of 30. In the higher classes, on the other hand, fatal phthisis is rare beyond 40, in comparison with its occurrence between 15 and 30. The reason of this will, he thinks, appear, when we take into consideration the differences observable on dissection, at different ages.

The two great pathological features in the lungs of the phthisical, are hepatization and white tubercles. According to Dr. Abercrombie and others, the latter passes slowly and insidiously into ulceration, without acute symptoms—while the hepatized lung is often the seat of considerable inflammatory action. Thus it happens that, in some cases, the antiphlogistic treatment may be serviceable; while in others, the disorganization advances slowly but steadily, without our having any means of arresting its progress. We agree with our author in believing that hepatization may occur in any habit of body, while the germ of tubercles is probably brought into the world with us.

——————— Finisque ab origine pendet!

Our author's observations lead him decidedly to the conclusion that the simple white tubercles, imbedded in the lungs, with little surrounding hardness of the pulmonary structure, occur much more frequently in the young than in the middle aged or advanced in life, and that a much greater part (often the whole) of the induration in the ulcerated lungs of older people, consists of the hepatized induration or dark coloured condensation of the proper pulmonary substance. He has seen, as we all have seen, in persons advanced in life, all the usual symptoms of phthisis, as cough, dyspnœa, hectic fever, profuse perspirations, emaciation, repeated hæmoptysis, and a mixture of puriform matter in the expectoration, where it turned out on dissection, that there was no ulceration of the lungs, but much disorganization of the condensed or hepatized kind, with effusions into the bronchia, &c.

"If this observation shall be confirmed by others, it may be supposed that the phthisis which is fatal to young persons, is more generally the effect of organic change of structure,—of the deposition of the matter of the white tubercles,—and depends more on circumstances of predisposition; and that which is so common in older persons of the lower orders, is more to be ascribed to frequent irritation, and to repeated and neglected inflammation, not originally of an unhealthy character." 372.

The means of prevention or of cure, in this last class, must of course be sought in antiphlogistic measures. The phthisis of young persons, on the other hand, our author regards as almost exclusively a scrofulous disease—and our success in its prevention must depend mainly on our knowledge of its causes. This investigation our author divides into two heads —which he thinks it is very important to keep strictly separate from each other. "The first object is to determine *the circumstances* on which the *scrofulous habit*, or *constitutional*

predisposition to scrofula depends, or by which it is increased; —the second, to ascertain *the mode in which scrofulous diseases are excited.*"

1. Our author has nothing new to offer respecting the nature of the external causes of scrofula—but in regard to their *relative importance*, he thinks too much stress has been laid on *hereditary descent*, which is irremediable in all—and on *influence of climate*, which is also irremediable, as affecting the bulk of the community. Too little pains, he thinks, has been taken "to determine *the amount* of the agency of *other circumstances*, (well known as predisposing the body to scrofulous disease,) from the cold and wet weather of our winter and spring." It is undoubtedly true, as our author observes, that it is not among those who are *most exposed* to atmospheric influence and vicissitudes, that we see most of the bad effects of the said agents. *They* are fortified, as it were, against such agency, which chiefly exerts its baneful influence on those whose previous condition was such as to favour its operation on the body—particularly those with languid circulation, and feeble constitutions. Thus, old people suffer more from cold weather than the young, although they are certainly much less exposed to it. So with the inhabitants of large towns—they are less exposed to the skies than country people, but suffer far more from such exposures—most probably from their greater debility of constitution.

"Now, what is true of the production of disease in general by exposure to cold, seems to be true of the production of scrofulous diseases in particular: but with these limitations, 1. That scrofulous action appears to be excited almost solely in the earlier periods of life;* 2. That to the production of this kind of diseased action, there appears to be required, besides other conditions, a certain peculiarity of habit, not understood, but manifestly hereditary; and, 3. That the constitutional debility, which disposes to scrofulous disease from cold, appears to be more permanent and habitual than that which disposes to the other diseases resulting from this cause." 381.

It is true that every one who is debilitated, even permanently, does not become scrofulous—nor does every one of strong constitution escape. Still, if it appear that, of a given number, previously weakened by other causes, a much larger proportion becomes affected with some form of scrofula than of an equal number, not so weakened, but otherwise similarly

"* This is probably connected with 'the only well established peculiarity in the anatomy of the arterial system in early life;—the much greater absolute size of the capillary branches.'—*Gordon's Anatomy*, p. 61."

circumstanced, we are entitled to conclude, that, *in many cases*, the scrofulous tendency depends in part on, or is much increased by, a state of general debility :—" and it is probably only in so far as it depends on this cause that it is remediable." The facts which seem most decisive as to the connexion of the scrofulous habit with general debilitating causes, are recapitulated by Dr. Alison as follows.

" 1. The differences in the symptoms and progress of inflammation, when scrofulous and when healthy, appear manifestly to indicate in the former case a languid state of the circulation, particularly in the capillary vessels of the diseased part.

" 2. The hereditary disposition to scrofula is chiefly transmitted from parents, and is most observed in children, who show evident marks of constitutional debility in other respects.

" 3. There is no state of the body, as every practitioner knows, in which scrofulous action is so easily excited, as the state of great and often permanent debility, which remains after severe febrile disease, continued fever, small-pox, measles, scarlatina, or which follows the long-continued use of mercury, or accompanies amenorrhœa.

" 4. The season at which scrofulous diseases have been observed to prevail most in this climate, is not that when cold weather has recently set in, and is most productive of disease in general, but the end of winter and the spring ; and they are then chiefly observed in those young persons who have manifestly lost strength during the continuance of the cold weather. The gradual diminution of strength in weakly persons during cold weather, is naturally to be expected, (conformably with what we know of the agency of cold on the healthy body, and with other physiological principles,) from the habitual chilling of the surface, and more particularly from the little exercise taken by these persons in such weather. It is commonly stated, likewise, that scrofulous diseases are not so prevalent in the coldest climates as in milder, but moister climates, such as that of Britain, where the temperature, during most of the winter and spring, is from 32° to 45°, and the air usually moist ; and it is perhaps to be expected, that such weather will be more weakening and depressing to the constitutions of young persons than colder, but dry and frosty weather ; because it will restrain them more from taking exercise, and will allow of less evaporation from the surface during any exercise that is taken. The observations made on this head, however, do not seem to me so decisive as they have been thought ; because due allowance has not been made for the circumstance of the more northern countries which have been compared with Britain in this respect, being more thinly peopled, and a much smaller proportion of their population being the inhabitants of large towns.

" 5. The most leading fact in regard to the connexion of the scrofulous tendency with debilitating causes, (and one which is of itself sufficient for the most important practical application that can

be made of knowledge on this subject,) is the much greater frequency of scrofulous diseases in the inhabitants of great towns, than in the agricultural population of any climate. 383.

Dr. A. quotes numerous writers to prove the infinitely greater mortality in towns than in the country. Thus, in London, one half of the children born attain only two or three years, while in several of the country parishes in Switzerland and Scotland, one half attain the age of 45 years. Mr. Malthus has even quoted authority for the probability of life, in one parish in Switzerland, being as high as 61 years!—These facts sufficiently prove that it is not merely exposure to *cold and wet* (for there is abundance of these in Scotland and Switzerland) which causes scrofula.

It has been remarked by Dr. Davis, (Annals of the Universal Dispensary) that the great cause of death among the children of the lower ranks in the metropolis, is inflammation of the lungs or bronchia, occurring either idiopathically or symptomatically. It is highly probable, as Dr. A. suggests, that the inflammation, in these cases, is rendered intractable and fatal by the weakness of habit which likewise renders them disposed to scrofula. In many of them, indeed, the marks of incipient scrofula are found on dissection. Dr. A. was told by one of the physicians of the HOTEL DES ENFANS MALADES at Paris, where upwards of 500 children die annually, and whose bodies are almost uniformly opened, that nearly one half of them presented scrofulous tubercles in some part or other. This is a greater proportion probably than would be found in institutions in this country; but it shows the power of scrofula in great towns, even in the fine climate of France. The deaths under 15 years of age, in the practice of the New Town Dispensary, for two years past, and which Dr. A. thinks may be taken as a fair example of the ordinary causes of mortality among the children of the poor in our great towns, were as follows:—hydrocephalus 40—convulsio 9—febris 3—febris infantum remittens 6—cynanche trachealis 3—pneumonia and bronchitis 18—pertussis 17—variola 32—rubeola 14—phthisis 8—tabes mesenterica 11—sequelæ rubeolæ 13—other minor complaints 25—total 201.

Our author thinks that nearly the whole of the hydrocephalic cases may be regarded as examples of scrofulous inflammation—many of them having shown other marks of that disease. Several of the cases under the heads of pneumonia, pertussis, &c. are recorded as having shown marks of scrofula on dissection—in short, 65 out of 201 were decidedly scrofulous. It would probably not be over-rating the scro-

fulous diathesis then, if we placed one third of the children of the lower orders who die in Edinburgh, as under its influence.

If we suppose two-thirds of the children born in London or Paris, to die under 15, and one-third of these to be scrofulous—then two-ninths of those born in the cities die *scrofulous* under 15—"as large a portion as die of *all diseases* under 15 in the parishes of Switzerland above mentioned." 391. Our author quotes numerous medical and statistical reports and returns—satis superque—to prove, what is incontrovertible—the great superiority of the country over towns, in respect to salubrity and longevity. It is not so easy, however, to explain the quomodo, as to prove the quo. Towns and congregated societies produce bad health and short life—but *how* do they do so? And how, in particular, do they generate so much scrofula?

"I am thoroughly convinced," says our author, "from the amount of it that I have seen in families not suffering under any material privations, that it depends much more on want of pure air and exercise than on deficient nourishment. But it is enough for our present purpose to assume, what I presume will not be denied, that it is intimately and probably necessarily connected with the state of debility so conspicuous in children of the lower ranks in large towns, compared with those brought up in the country.

"I apprehend we may go a step farther in pointing out this connexion, and assert, that the weakness of system produced, in many cases, by residence in *hot climates*, during childhood and early youth, gives probably a disposition to scrofula, in those who are afterwards exposed to the exciting causes of it during early life. We know, at least, that a great majority of the inhabitants of these climates, both Negroes and Hindoos, are unusually prone to scrofula, when they come to temperate climates, and even suffer from it, in some instances, in their own, where Europeans are nearly free from it." 397.

It is undoubtedly true, that the children of Europeans, born in the East and West Indies, are tender plants, and not a little liable to scrofula when they come to reside in the climate of their forefathers—a fact that tends to corroborate the connexion of general debility with scrofula. Another corroborating fact is seen in the agency of tonics, in the cure or prevention of scrofula. Of these tonics, the most powerful is a residence in the country. "There, as Willan observes, a change of pursuits, a more regular plan of diet and exercise, a more clear and purer atmosphere, the salubrious exhalations from growing vegetables, and the grateful stimulus of their odours, in a short time restore vigour to the body, and firmness and serenity to the mind."

Cold bathing is well known to be a corrector of the scrofulous diathesis, as it fortifies the body against fresh attacks of the disease. The rarity of phthisis among butchers, is another illustration of the efficacy of a tonic regimen in lessening the scrofulous tendency. Medicines also, which improve the state of the digestive organs, and thereby allow more nutriment to be thrown into the system, come really under the head of tonics, though not so classed in systems of materia medica.

"Now, having stated the different facts which prove the intimate connexion of the scrofulous diathesis with constitutional debility, we have in fact stated all that has been ascertained in regard to it; beyond the general fact of its being, for reasons quite unknown, much more easily developed, even when all other circumstances are alike, in some persons than in others, and particularly in those whose progenitors have suffered from scrofulous diseases. It is possible, no doubt, that it may not be simply by weakening the body that all the causes I have mentioned dispose it to scrofula; but nevertheless, if we can ascertain, at present, *nothing else that is common to all these causes* but this, that they do weaken the body, we are fully justified in ranking them together, in the mean time, under this head; and in fact I believe we may comprehend all that has been ascertained of the causes by which the disposition to scrofulous disease is produced or increased, lessened or destroyed, under the general proposition, that whatever tends permanently to weaken the body promotes it, and whatever tends really and permanently to strengthen the body counteracts it. By far the most powerful of these last are, habitual exercise, pure air, the application of cold in various forms and with certain precautions, and mental excitation; and the evidence that has been stated on a large scale seems to me sufficient to entitle us to add, that the action of causes of the latter kind must be both certain and powerful on the whole, although many circumstances may occur to embarrass the practical application of them in individual cases." 403.

2. What has been said applies only to the formation of the scrofulous habit—"not to the excitation of scrofulous disease."

"In some instances, scrofulous disease shows itself in well-marked inflammation, although of a peculiar character, proceeding from its usual causes, particularly from the long continued application of cold. But in most cases, in which scrofulous diseases are fatal, the diseased action is in internal parts, and the first symptoms are obscure and equivocal. The chief, and certainly the most characteristic appearances on dissection ar tubercles, in different stages of progress; and the question as to the mode of excitation of scrofulous diseases, resolves itself into the question,—How these tubercles are formed, and how the changes in them, which become dangerous to life, are produced?" 403.

It is in this point of view that the question respecting the origin of tubercles is chiefly important. Some pathologists

place them to the account of inflammation, while others, as Laennec, Baron, &c. consider their formation as quite independent of that process. The expressions of Dr. Baron are, that tubercles, and the disorganizations to which they lead, "are not the product of any species of inflammation; and that although inflammation may attend their growth, and modify *the symptoms* which they occasion, yet it is very different, both in its origin and consequences, from that which attacks a part unaltered by previous disease, being, *in the former case, the consequence*, and in the latter, the cause of the altered texture." Laennec expresses his opinion more guardedly. He says, that inflammation of the lungs occasionally co-exists with tubercles there, and may probably sometimes become the occasion of their development, in subjects predisposed to their formation; while in other cases, the irritation occasioned by tubercles already existing, may induce inflammation. With these admissions, he still thinks, that tubercles most frequently form without previous inflammation—and that when inflammation does co-exist with any tubercular affection, it is most commonly *posterior to it in date.*

"On the other hand," says Dr. Alison, "the opinion which I believe has been on the whole more general, at least in this country, that tubercles are a product of a peculiar kind of inflammation, has been lately maintained with much ability, and perhaps in too unqualified terms, by Broussais. Several of the cases related by him,*—in which young men, previously fit for their duties as soldiers, have been seized with catarrhal or pneumonic symptoms, from a well marked exposure to cold, or an injury on the breast; have passed gradually into the state of phthisis, and died in a few months; and have exhibited, on dissection, the lungs completely studded with tubercles of various sizes, and in various stages,—appear to me to furnish very strong evidence; particularly, as the fact of their having been capable of military duty during the fatiguing campaigns of the French army, up to a given time before their death, furnishes a sort of standard of the state of the vital organs up to that time; but as, in all these cases, there appear to have been considerable marks of inflammation (adhesion and hepatization) as well as the tubercles, found on dissection, the evidence deduced from them can hardly be said to be decisive. It may still be said, that the tubercles had all existed prior to the inflammation from the known external causes; and that the symptoms, during the last few months of the patients' lives, had been the consequence of that inflammation supervening on the tubercles, and perhaps quickening their growth, but not producing them.—It must be allowed, that there are few cases, in which tubercles are found, on dissection, where this ambiguity does not exist."—407.

* "Hist. des Phlegmasies Chroniques, vol. ii."

Dr. Alison seems to steer a middle course between the extremes of Baron and Broussais. His observations lead him to think that, where there is the constitutional tendency to scrofula, tubercles may form in very different circumstances, and with different degrees of rapidity. He has little doubt "that they often do form without inflammation (of such a character as to be detected by symptoms during life) preceding them;"—and that, in the lungs at least, the inflammation, of which the undeniable marks are so often found along with them after death, has really often been posterior to them in date. But he has also been led to believe that it is not merely, as Laennec states, a possibility, but a real and frequent occurrence, that inflammation, acute or chronic (to which he would add, *febrile action)* however produced, becomes, in certain constitutions, the occasion of the development of tubercles. The cases which have occurred to our author, and in which it has appeared to him nearly certain that tubercles had formed in consequence of inflammation, he arranges under two heads:—The *first* consists of cases in which they did not cause death, and were found, on dissection, in an incipient state, but so immediately succeeding to the symptoms, and so closely connected with, or even passing by insensible degrees into, the undeniable effects of inflammation, that it has appeared to him impossible to suppose that their formation had been independent of it. The first case, which is short and interesting, we shall give without abridgment.

"J. P. æt. 4, of a weak habit, but healthy, was seized, in the beginning of November 1822, with febrile symptoms, headach, and pain of abdomen, attended with tenderness on pressure; which last symptom, however, was not urgent. The febrile symptoms remitted repeatedly, but she continued subject to much pain of abdomen, generally with a loose state of the bowels, till the beginning of December, at which time I first saw her. The symptoms had just then undergone a remarkable change,—the pain of the abdomen was almost gone, but she had a great deal of vomiting, excited by almost every thing she swallowed, cold extremities, small, often irregular pulse, and drowsiness approaching to coma, though without headach or delirium. These symptoms lasted with little change, except progressive emaciation, for ten days; the vomiting then ceased, and she was seized with convulsions, followed by coma and dilated pupils; in which state she lay four days, with occasional returns of convulsion, and died on the 19th December.

"On dissection, the ventricles of the brain were found distended with serum.

"Almost the whole peritoneum, except the covering of the stomach, was covered with an exudation, resembling the coagulable

lymph so often thrown out on it by inflammation; except that it was generally of a somewhat yellower colour, and was disposed chiefly, though not entirely, in the form of round tubercular eminences, of various sizes, none so large as a split pea. By the intervention of this matter, numerous adhesions of the liver to the parietes of the abdomen, and bowels to each other, had taken place. In various places, where the exudation was thickest, the peritoneum was thickened, and very vascular. In the pelvis there was an irregular mass, of the same appearance, which hardly adhered to the peritoneum. The ligamenta lata of the uterus were much thickened, and of a deep red colour, and on cutting into them, much thick pus was found between their layers.

"This was manifestly a case of conversion of abdominal disease into hydrocephalus. Had it not been for that conversion, the inflammatory appearances in the abdomen might probably have subsided, the pain of abdomen having almost ceased long before death. The disease would then, I have no doubt, from what I have seen in other cases, in which there were depositions on the peritoneum in precisely similar forms, but of larger size and somewhat firmer consistence, have passed into the form of the tuberculated accretions on the peritoneum described by Dr. Baron; and if this had been fatal at a subsequent period, it would have been impossible to judge whether inflammation had produced the tubercular masses that were found or not;—a point, on which the appearances observed in this early stage of the disease in the present case, left, I believe, no doubt whatever in the minds of the gentlemen who witnessed this dissection." 413.

2. The second case was that of a healthy child, two years of age, uncommonly fat and plethoric, who was seized with measles preceded by a convulsion fit, in the end of May 1823. Some fever and shortness of breath, with trifling cough, continued after eruption had faded. Our author saw her on the 18th June, when she had quick pulse and warm skin, evening exacerbations, tendency to coma, pupils somewhat dilated, vision imperfect, rolling of the head, and drawing up of the legs, grinding of the teeth, tension and tenderness of the abdomen, irregular bowels, dark green fæces.—"She had a papular, or rather a tubercular eruption on different parts of the skin, that came out a few days previously." These symptoms continued with little change, and she died suddenly, after a slight convulsion, on the 26th June. On dissection, the internal coat of the stomach was manifestly diseased, very red at some points, at others of a brownish colour and softened, with some abrasions towards the pylorus. The liver was firmer and paler than usual. There were a great number of tubercles, easily rubbed off, on various parts of the peritoneum, all quite solid, though many of them exceedingly minute. There were a few in the substance of the liver—many in the spleen, which was enlarged and hard—

several beneath the peritoneal coat of the intestines. A portion of the mesenteric glands was tuberculated—many small tubercles on the surface and in the substance of the lungs—the lower part of the left lung was very vascular and hepatized, and in the middle of the hepatized portion, there was a large irregular tubercle of firmer consistence than the others. The head, strange to say, where the immediate cause of death most probably existed, was not examined.

The following are Dr. Alison's deductions from this case.

"1st. That the state of the child's health, before the attack of measles, seems nearly to preclude the possibility of their having existed then.

"2d. That the child never recovered from the febrile and inflammatory symptoms produced by the measles, and died evidently of their sequelæ, about a month after their appearance.

"3d. That the symptoms before death were inflammatory, and the tubercles found after death, in various places, but particularly in the spleen, the mesenteric glands, and the lungs, were each surrounded with unusual vascularity,—and the large tubercle in the left lung with a considerable extent of hepatization." 415.

We can hardly agree with Dr. Alison in thinking that such an extensive tubercular condition, where some of the tubercles, too, were large and consistent, was the work of rather less than a month. That their growth might have been greatly accelerated during the measles and the febrile state that succeeded, we have no doubt, but that they were actually formed, *de novo*, within that period, exceeds our belief.—Neither do we think that the health and embonpoint of the child, previously to the measles, afford unequivocal proof of the absence of tubercles in the internal organs. We have opened many bodies, where the cause of death was sudden, and where perfect health preceded the fatal event, and yet where numerous tubercles were found in the lungs. We consider the case in question, therefore, as equivocal, and of little avail in the support of Dr. Alison's doctrine. It is nevertheless interesting, on many other accounts. We shall pass over the third case, as not being very satisfactory, in order to bestow more space on the fourth, which is one of considerable importance.

Case 4. D. M. aged 18 months, subject for six months to a discharge of matter from the left ear, and more recently to irregular febrile attacks and diarrhœa, but unaccompanied with any pectoral affection, was admitted to the Public Dispensary on the 11th July, 1823, with measles, the symptoms having commenced a few days before. After the decline of the eruption he continued subject to cough, and did not re-

gain appetite or strength. About the 24th July, he became feverish, and the head appeared affected. He had occasional screaming and vomiting, the cough persisting. On the 1st August, he was comatose—pulse 100, sharp and irregular—pupils dilated—countenance pale—skin cool—body much emaciated—breathing rather short—rattling in the throat.—He died on the morning of the 3d.

Dissection. There was some effusion of coagulable lymph on the surface of some parts of the pleura pulmonalis. The cellular substance beneath the pleura was in some places emphysematous—and in many places there were small elevations of the pleura, covering little cavities, a part of which only were filled with tubercular matter, in a soft gelatinous state, with a little air. There were a great many tubercles, in the same stage of progress, dispersed through the substance of the lungs.

"Immediately adjoining the tubercles, both on the surface and in the substance of the lungs, there was, very generally, increased vascularity, and a degree of condensation of the pulmonary substance, but this was of so small an extent, that every part of the lungs crepitated in the usual manner, when cut across. The bronchiæ, as usual after the measles, were very vascular, and contained much muco-purulent matter.

"The bronchial glands were enlarged, and sections of them showed increased vascularity, and points of tubercular matter; and it was quite obvious, on minute examination with the microscope, that from the points where the tubercular matter was distinctly formed, there was a very gradual transition into the portions of the glands that retained the healthy structure, so that it was impossible to say where the healthy, but unusually vascular texture ended, and the tubercular substance began.

"On the peritoneal surface of the diaphragm there was a spot of inflammation, with a deposition of matter exactly similar to that observed in Case 1, disposed in the form of irregular tubercles, beneath the serous membrane.

"There was a considerable effusion of serum under the arachnoid membrane; the brain was very soft; and the ventricle distended with serum.

"In the lower part of the left lateral lobe, the substance of the brain was of a red colour, and quite broken down; and a portion of the pia mater, immediately beneath this, was destroyed by ulceration." 419.

The pia mater, immediately around this spot, presented a curious appearance. It was very vascular, and there was much deposition, in the most vascular portions, of a whitish matter, which appeared on examination to be between the pia mater and arachnoid coat, and to cause an intimate adhesion of them.

"In some places, where the vascularity was most intense, this pia mater had the usual irregular form, and just the usual appearance of an inflammatory exudation; but in many others, it was disposed in little roundish masses, having exactly the same appearance as the tubercles of the lungs, and of the bronchial glands, in the same subject. These smaller deposites were of very various density; some appearing, on examination with the microscope, merely as ill defined nebulæ, dimming the transparency of the membrane; others as well defined, opaque circular prominences; but none of them, either here, or in any other texture except the lungs, had the least appearance of being enclosed in vesicles, or cysts. They resembled, very nearly, the pustules so often seen on the tunica conjunctiva of the eye, particularly in scrofulous persons, in their first stage." 420.

Here they had an opportunity of seeing tubercles in their incipient stage—the child having died in consequence of the disease of the brain and effusion into the ventricles. The particulars in this case which appear to our author to be the most decisive, are—

"1. The certainty derived from the information, both of the father and mother, who were questioned separately, and were both very intelligent and attentive, that the child had no pectoral symptoms, previously to the attack of measles, with the usual pneumonic symptoms, four weeks before death, but had suffered ever since then from cough, with some shortness of breathing.

"2. The lungs being found, on dissection, studded with tubercles in their soft incipient state, chiefly contained in small cavities, which they did not completely fill; almost all of them surrounded with unusual vascularity, and slight condensation of the pulmonary substance.

"3. The occurrence of tubercles, in the same state of forwardness, but not contained in vesicles, on a portion of the peritoneum, the bronchial glands, and on the pia mater; and their being equally, in all these places, surrounded with increased vascularity.

"4thly, and chiefly. The incipient tubercles on the pia mater being closely contiguous to, of the same appearance as, and evidently connected with, a larger and more irregular deposition of matter, which had the usual characters of inflammatory exudation on the pia mater—which was connected with manifest effects of inflammation in the adjacent substance of the brain,—and which, if it had occurred alone, I think no one could have hesitated to call a product of inflammation."* 421.

We cannot spare space for the fifth case. The conclusion to which all the observations under this head seem to Dr. Ali-

"* The origin of the tubercles, in these cases, appears to have been very similar to what has been observed by Magendie, in his minute examination of phthisical lungs. At least, his observations tend to confirm the fact of tubercles, in this texture, frequently appearing, at first, in air-cells which they do not completely fill, and being, in the first instance, surrounded with vascularity.—*Journal de Physiologie*, t. i. p. 32."

son distinctly to point, is, "that in certain constitutions, inflammation of various textures tends to effusion of whitish or yellowish matter, not in any considerable deposites, but chiefly in small circumscribed masses, more or less completely separated from each other, and that these are a common origin of scrofulous tubercles." It is obvious that Dr. Alison's theory is at variance with the hydatid doctrine of tubercles, maintained by Dr. Baron. We cannot presume to reconcile these contending parties. Sunt arcades ambo.

"II. The second set of cases which I have to adduce on this subject, consists of examples, in which children, previously in good health, or at least unaffected with any pulmonary complaint, have been seized with well-marked inflammatory symptoms, generally from a known cause, certainly adequate to that effect; these symptoms have lasted some time, and been manifestly dangerous to life, —have subsided very imperfectly,—the children have passed into the state of phthisis, and died within a few months; and on dissection, tubercles have been found, in various stages of progress, but with little or no other appearance which could be considered either as the effect of the inflammation *known to have existed*, or as the cause of death." 425.

Case 6. A boy, five years of age, pretty stout, but somewhat rickety, and with a small scrofulous sore on his leg, was attacked in the end of November 1815, with well-marked pneumonic symptoms. While these were recent he was seen by different medical men, was twice bled, and had the usual remedies for such complaint. The febrile symptoms abated, but his breathing continued short, his cough troublesome, and he passed gradually into a state of complete hectic, dying considerably emaciated in the end of January 1816. On dissection, the lungs were found of their natural spongy texture throughout, and the disease appeared to be confined to the bronchial glands, which were enormously enlarged, and all converted into the usual cheesy or tubercular matter.—There was no other disease in the thorax or abdomen. For cases 7, 8, and 9, we must refer to the original, as our limits are drawing to a close. Our author has selected the foregoing instances out of many which have occurred to him, and thinks he may with confidence assert that such cases are by no means rare among the children of the lower orders of society in large towns.

"A healthy child," he observes, "shall be seized suddenly with well-marked pneumonic symptoms, either from cold, or from the contagion of hooping-cough or measles. The symptoms shall be such, as to justify a confident expectation (founded on dissections of children dying in the height of such affections, of which I could produce many examples) that if speedily fatal, they will

leave behind them the indications of active inflammation. The urgent danger shall be got over, but the cough and shortness of breath shall continue with progressive emaciation and debility, till death takes place, at the end of some weeks or a few months; and on dissection, there shall appear tubercles in great numbers, and sometimes of a pretty large size, with no condensation of the pulmonary substance, or only a slight condensation of it, just about the tubercles." 431.

In drawing conclusions from such cases, our author does not mean to lay much stress on the circumstances of the patient being previously in health. What he chiefly relies on is, *the certainty* of inflammation, *from a known external cause*, having existed, some weeks or a few months *only* before death, and the patient having been in great danger from it, *and never having recovered* from the symptoms of it;—and the numerous and advanced tubercles being the chief or *only appearance* found on dissection.

"The question is, whether we are to believe that the inflammation caused the tubercles; or that the inflammation, which certainly existed so recently, and the chief symptoms of which never abated, but went on uniformly to the end, did not cause death, nor leave any consequences perceptible on dissection, but merely coexisted by chance with another affection previously existing, and which ran an independent course?" 433.

We have now given a very full analysis of Dr. Alison's paper, and have enabled our readers to judge for themselves respecting the value of the professor's observations. We will not bias their judgment by any commentary of our own. We may just be permitted, however, to say, that the language is by no means so clear and well constructed as we might naturally expect from a professorial chair. There is room for improvement in this respect, and we have no doubt that Dr. Alison will improve accordingly.

VII.

An Essay on Curvatures and Diseases of the Spine, including all the Forms of Spinal Distortion: to which the Fothergillian Gold Medal was awarded by the Medical Society of London; and presented, at a Special General Meeting, on the 3d of May, 1824: with some Additions. By R. W. BAMPFIELD, Esq. one of the Surgeons to the Royal Metropolitan Infirmary for Diseases of Children; Fellow of the

Medical Society of London; Author of an Essay on Hemeralopia, or Night Blindness; of Practical Treatises on Tropical and Scorbutic Dysentery, &c. Octavo, pp. 378. London, October 1824.

Of late years, works on the Spine have presented themselves in as regular succession as the Ghosts of Banquo. One treatise can hardly be perused before "another and another still succeeds." Pathological investigations run, like the currents of the high seas, sometimes quick, sometimes slow—never in any regular order, nor amenable to any fixed law. Affections of the spine seem to be one of the prominent studies of the day, which many have cultivated, but not with equal success:—"non ex aliquovis ligno fit mercurius." Several circumstances are necessary to a successful investigation of any medical subject. Many who have the talent, have not the opportunity—and still more have the means, but want the inclination. It is very evident that Mr. Bampfield is possessed of the requisite talent for the investigation on which he has entered, and that he has had ample field for putting his talent out to good interest, instead of hiding it in the earth, like the sluggard of old. Mr. Bampfield had his attention directed to the present subject, several years ago, in consequence of meeting with some interesting cases in private practice; but he had not sufficient field for the complete investigation of spinal diseases till he became attached to the Royal Metropolitan Infirmary for Diseases of Children, where numerous cases presented themselves, the experience derived from which is now meritoriously laid before the public at large. Previously to this, Mr. Bampfield had published some essays on the subject in the London Medical and Physical Journal, but not in a connected or arranged form. The proposal of the Fothergillian Medal, by the Medical Society of London, determined our author to arrange his facts and observations into a concise essay, which was sent to the committee in December 1823. prior to the appearance of publications on the same subject by Mr. Shaw, Dr. Dods, Dr. Jarrold, Mr. Charles Bell, and Dr. Ollivier.—The work gained the prize, and has now issued from the press, with emendations and additions.

The Essay is divided into fourteen chapters and an appendix, investigating somewhat fully and formally the various diseases of the spinal column and its important contents, together with their causes, consequences, and modes of treatment. Considering how very freely we analyzed the several works which have already appeared on the subject of spinal diseases,

it will not be necessary to enter so minutely into a review of the present volume, as if it had appeared a year or two ago. Still, as the construction of the work affords us a facility of offering to our readers a kind of *resumé*, or recapitulation of what has been scattered through various numbers of this Journal, we shall skim over the different topics, and condense some of the most prominent features into the present article.

Nosology. Mr. Bampfield divides diseases of the spine into those chiefly affecting the bones and joints of the vertebral column, and those affecting the medulla spinalis and its coverings. Of the distortions and projections of the spine, he makes two species—one denominated curvature—the other, angular projection. Of the former there are three varieties, namely, *excurvation*, or curvature outwards;—*incurvation*, or curvature inwards;—and *lateral*, or curvature to one or both sides. The angular projection has not any varieties.

Curvatures of the spine may take place in any part of the column, but they most commonly occur in the dorsal region, frequently including the whole of the dorsal vertebræ, in the form of an arc. The curve may be divided into two extreme points, and a centre or middle, which is its angle and the point of pressure from the superincumbent weight—a circumstance which ought to be remembered. The *angular projection* generally takes place in the lower dorsal or lumbar vertebræ, commonly involving some of the former. Curvatures and projections of the spine are generally formed during the growth of the body—from the age of 1 to 21 years. They do occur, however, though not frequently, from the age of 21 to 40. Beyond this they are very rare.

Till recently, curvature of the spine was considered as associated with caries as its cause; but more extensive investigation has proved that spinal curvatures are more frequently without than with caries of the vertebræ.

1. *Excurvation.* This is the most frequent of all spinal curvatures—occurring during childhood, puberty, and more rarely in old age—except as the natural curve of senility. The following symptomatology cannot be abridged without detriment.

"The commencement of excurvation of the spine is sometimes marked by pain of the vertebræ about to be involved in the curvature, which is more palticularly felt on using exercise, in the erect posture, or may be, at all times, excited by pressure on the spinous processes: in the latter case, an adult would shrink from the pain and mention it; a child would cry. Should inflammation

of any of the constituent parts of the vertebral joints exist, the pain would be of a more permanent nature or of more frequent recurrence, and the patient will be considerably relieved by assuming the horizontal posture, and in a less degree by bending the spine backwards. The majority of cases are not preceded by any pain of the vertebræ, that attracts so much attention, or occasions so much suffering as to lead to voluntary complaint. In some cases, chiefly in those accompanied with inflammation, if a sponge wrung out of hot water be passed along the spine, it will create increase of heat and pain in the part disposed to curvature, but this is not a result obtainable in the generality of cases. An adult generally states the pain to be of an obtuse kind, and feeling like a weight, but it can only be inferred that a young child feels pain by its crying, when made to sit up or walk about. At this period, if the spine be accurately examined, particularly if it be bent a little forwards, some of the spinous processes of the dorsal vertebræ, which are the seat of pain, may be observed to project more irregularly than the rest, so that they stretch the skin over them, and make it appear white and shining, resembling the phenomenon of the stretched skin over the knuckles of a clenched fist; yet this appearance of the curvature at its commencement is only of a temporary nature, as by laying the patient in a proper horizontal posture, and using mechanical aid, the vertebral column can be restored to its spinal line. About the time the above evidence of incipient curvature is manifest, many adults will complain of a sense of weakness in their back, of a lassitude that disinclines them from exertion, and of fatigue being soon induced by exercise, all of which disposed them to seek repose and avoid motion. A child, if he have not previously gained the use of his legs, has the ability of using the lower limbs deferred long beyond the usual period children should walk, and if he had acquired the power of walking, he will gradually lose that remarkable spirit of activity and endless motion peculiar to children, and become listless and languid, seeking his mother's lap for a resting place. Should these symptoms of weakness and indisposition to exercise lead to the frequent adoption of the recumbent posture, the curvature will increase very slowly, or its progress may be arrested for a time. Should however, the patient not lie down more than usual, but be seated in a chair during the day, where the vertebræ will have to bear the superincumbent weight of the head, &c. especially if he walk about as much as he is able, the curvature will advance with considerable rapidity, and after a little increase. If the patient be placed on his feet, he cannot maintain the vertebral column in the erect attitude, but inclines the upper part forwards; and he moves with a slow, hesitating, tottering gait, and is soon tired, or he cannot direct his steps to the proper point, and he stumbles, trips or crosses his legs, and falls down crying. In this state a child dreads to be put down, and when on his feet will, with tears, cling to his mother or nurse for support, and if deprived of it, he will totter, his knees will bend, and he will soon fall, unless caught. The lower extremities gradually diminish in size, as the curvature advances, and frequently lose part of their natural sensibility and tempe-

rature; the muscles exchange their plump and firm feel, for a softer one, and their power daily decreases. The patient will often sit with his legs crossed, and in bed will sometimes experience pains in his knees, and convulsive actions of the muscles of the thighs, which are more particularly felt and described by the adult, whose loss of muscular power is more generally accompanied with a sense of coldness and diminished sensibility and firmness of the extremities. If a palsy of the lower limbs be now induced, there is of course an end to locomotion; the muscles and cellular texture of the extremities waste and wither; the limbs become flaccid and cold, and, if lifted up, will fall down like a mass of inanimate matter; the joints are more rigid than in ordinary paralysis, and the skin frequently retains some power of sensation." 12.

This calamitous event supervenes only occasionally; for the majority of adults and minors retain sufficient muscular power of the extremities to enable them to move about in their room, by the aid of chairs, tables, &c. If the patient be confined to the horizontal posture, more especially the facial, when the excurvation is in the incipient stage, no permanent curvature will ensue, provided the same posture be long enough employed for the dorsal muscles to recover their energy, or the disposition to inflammation and scrofulous action of the vertebræ be removed. On the other hand, should the patient incautiously continue to sit up and walk about, a curvature of the spine ensues and gradually increases. The first projection, already described, becomes accompanied by another and another, until many or the whole of the dorsal vertebræ form a curve.

"As the curvature increases, the spinous processes of the dorsal vertebræ gradually separate from each other; but the greatest degree of separation takes place about the middle of the curve, where the space of half an inch is left between them, and the forefinger can be easily inserted. When they are separated at this distance, it may be always inferred with much probability, if not certainty, that the horizontal surfaces of the bodies of the vertebræ, of which these spinous processes are corresponding parts, are either greatly or wholly absorbed, as well as the intervertebral substances between them." 14.

The above process is accompanied necessarily by distortion of the ribs and sternum. The general health becomes impaired, and particular organs and functions suffer derangement. These derangements are described, with much fidelity, by Mr. Bampfield, as affecting the muscles, the bones of the spine and chest, the spinal marrow and nerves, the ligaments, the arterial and absorbent systems, the thoracic, abdominal, and pelvic viscera. We can glance but very slightly at these important topics, recommending the reader to study carefully the excellent original.

The Muscles. The loss of power, of density, and of firmness in the muscles of the lower extremities and of the back is generally conspicuous in this disease. This loss of power in the muscles of the back prevents the patient maintaining the vertebral column erect, for more than a few minutes at a time, and at length he is obliged to support the upper part of the body by resting with his arms or elbows on some collateral fixture. The dorsal muscles become not only elongated, from the detour which they make round the convexity, but they also appear to be diminished in size at the middle or most projecting points of the curvature—an appearance which is verified by dissection. The abdominal muscles and diaphragm also have their natural positions deranged, and their functions consequently impeded. So much weakened have the abdominal muscles become, in some cases, that Mr. Copeland has considered them to be paralytic—a state, however, in which Mr. Bampfield has never seen them. The muscles of the upper extremities do not always escape, but are not so often affected as those of the lower. In a few cases, the sphincters of the bladder and rectum lose their tone. For numerous remarks, of a highly interesting nature, respecting these muscular affections in excurvation, we must refer to Mr. Bampfield's work, from page 15 to page 22.

Affections of the Bones. These are considered, *first*, in respect to their distortion—and *secondly*, in respect to the disorganization, or destruction that ensues. By an ingenious chain of physiological and mechanical reasoning, Mr. Bampfield arrives at the conclusion, that, in simple cases, when the muscles of the back, from their debility, are unable to sustain the vertebral column erect by their contractile power, the top of the spine necessarily bends forward, forming a projection or excurvation backwards. The consequence is, that unnatural pressure is unavoidably made on the anterior portions of the bodies of the vertebræ and intervertebral cartilages. As the relative proportions of the vertebræ must come to be altered by this unequal pressure, so the curvature will increase—and if this take place, as it usually does, during the growth of the body, permanent curvature must be produced, bringing in its train a distortion of all the bones of the thorax.

"It might have been previously mentioned, that when the curvature is extensive and the back very weak, a slight lateral curvature is sometimes superadded to the excurvation, which in these cases sometimes becomes double; the lateral curvature in this instance seems to arise from the patient seeking to rest or support

himself, when sitting or standing, by leaning to one side, after he finds himself weary or fatigued from inclining forward. When the double excurvation occurs, the first curve is formed by the dorsal vertebræ, and the second, which is always very slight, by the lumbar vertebræ." 28.

So much for the distortion of the bones. We next come to their destruction. This, Mr. Bampfield observes, is accomplished in two different ways—presenting after death dissimilar appearances. One mode is by caries or *ulcerative* absorption—the other by *simple* or progressive absorption. Caries of the bodies of the vertebræ is, in general, the result of that slow scrofulous inflammation which peculiarly invades the cancellous structure of these, and the articulating extremities of other bones; in which case, the remaining portions of the bodies of the vertebræ are often soft, so as to be easily divided with a common knife. Caries also ensues from common chronic inflammation, in which case, the portions of the vertebræ contiguous to the carious part are unusually vascular, and of a dark colour, but they preserve their natural texture and hardness.—The bodies of the vertebræ are destroyed in the most irregular manner, as the drawings found in works, and the specimens in anatomical collections, amply illustrate. Carious vertebræ often produce inflammation of the soft parts contiguous, terminating in suppuration.

"Hence, abscesses are formed, which first collect opposite the carious vertebræ;—if these should be the dorsal, the abscess will collect in the posterior mediastinum, and the pus may separate the pleura from its natural adhesions, and by pressing on the lungs occasion inflammation of the pleura, and distressing dyspnœa; or it may burst into the thorax and occasion death. If the lower dorsal or lumbar vertebræ be the seat of caries, the collection of pus may insinuate itself between the crura of the diaphragm, may separate the peritonæum from the diaphragm or its other natural adhesions, or it may penetrate through the peritonæum among the intestines, and excite peritonitis that may terminate in death. The collections of pus, even when as high as the upper part of the posterior mediastinum, sometimes gradually insinuate themselves along the spine, and present anteriorly in the course of the psoæ muscles or of the spermatic chord, or these abscesses may take an outward direction and break posteriorly on one side or the other of the vertebræ, so as to become what are strictly denominated lumbar abscesses." 31.

"The destruction of the bodies of the vertebræ by progressive absorption is effected in a different manner from that by caries or ulcerative absorption. Progressive absorption is always begun and continued on their horizontal surfaces, and proceeds in an oblique direction from the anterior to the posterior parts of their bodies, so that if the disease be suffered to run its course without interruption, the bodies of the vertebræ are first reduced to a cuneiform

shape, and are then rendered thinner and thinner, until they are wholly absorbed, and as this process is, in general, the consequence of unnatural pressure, the intervertebral cartilage becomes absorbed previously or contemporaneously with the bone. By this process, I have seen, on dissection, the bodies of five vertebræ entirely destroyed, and that of another partly absorbed. I have also seen the whole of the dorsal vertebræ and intervertebral cartilages reduced more or less into the cuneiform shape by this process, without the integrity of the joints being done away with. In instances of more limited disease of this nature, only two or four vertebræ are reduced to this shape. No abscesses form in cases of disorganization from the action of the absorbents. In such, it is probable, the bone is less solid than natural, or its organization so imperfect as to render it liable to absorption." 32

The curvature is in an inverse ratio to the number of vertebræ destroyed, being more acute or projecting when there are two or three, than when there are four or five destroyed. It is curious that the posterior surfaces of the bodies of the vertebræ forming the anterior part of the spinal canal, are almost always the last to yield to, or be destroyed by, the ulcerative or progressive absorption, and generally escape so far as to leave a bony continuity to that part of the canal. Nature, however, is sometimes reduced, as it were, to the necessity of uniting several spinous processes by anchylosis, to maintain the said bony continuity, and insure a competent defence to the medulla spinalis.

The ribs become deranged in form and structure, in proportion to the extent of the excurvation. The sternum generally projects forwards. The right side of the chest is usually more malformed than the left, but the false ribs are seldom implicated.

Affections of the Spinal Canal and Contents. If the curvature be formed during the growth of the body, the calibre of the spinal canal becomes contracted in size, at the part where it passes through the curved vertebræ. But its interior surface is generally preserved smooth and continuous—"by such wonderful powers does the Creator protect and preserve vital parts." When the excurvation has arisen in an adult, and where the growth has been completed, the above-mentioned diminution of calibre in the spinal canal has not appeared in the dissections which Mr. Bampfield has made. The foramina on the sides of the vertebræ, for the passage of the spinal nerves, must necessarily take the situation of the vertebræ, and though occasionally diminished in size, like the part of the canal with which they communicate, he has never found them obliterated or destroyed. The anomalous symptoms caused by derangements of the spinal chord would be endless to enumerate.

"The tortuous course of the spinal chord, the compressed appearance and diminished size of a part of its length, and the longer course of the nerves, which are joined to this curved and projecting portion of it, do not uniformly produce similar effects on the system; nor does the degree of nervous power lost, necessarily depend upon the extent of the curvature, for a patient with a very small degree of curvature, and with but little vertebral pain, may be affected with paralysis of the lower limbs, with general weakness and a torpor of the digestive and urinary organs, whilst another, who has had several bodies of the vertebræ destroyed, and whose dissection has disclosed a contracted spinal canal and chord, shall have been enabled to walk about to the last hour, and shall have preserved the animal functions in a state but little impaired. Yet it appears to be quite certain, that many of the symptoms which supervene in this complaint, must be attributed to the derangements of the spinal chord and nerves occasioned by the curvature. To refer to this cause only some which affect the nervous system, I might mention head-ache, fits, and every loss of sensation of parts or of muscular motion. The disordered respiration is also partly owing to the same cause. I have been induced to believe too, that inflammation and curvature of the spine predispose to inflammation of the brain, for in the year 1822, three patients who had been under my care for diseases of the spine, were attacked with phrenitis and died. The first, a boy, after having been cured of spinal inflammation; the second, a girl, during her treatment for the angular projection of the spine; and the third, a girl, after having been cured of excurvation of the spine, and sent into the country. Many affected with curvatures are subject to a variety of nervous complaints. Dissections have disclosed the trunk of the intercostal or great sympathetic nerve, to be either shortened in proportion to the length of the body diminished by the destruction of the bodies of the vertebræ or by the curvature of the spine, or bent into a circuitous course, and it is probable its shortened dimensions or tortuous course impair the power of the nerves derived from it." 44.

Affections of the Ligaments. Inflammation of these parts is generally propagated from, or excited by, caries in the bodies of the vertebræ and in the intervertebral substance. In either case it usually terminates in ulceration, and irregular destruction of the said ligaments. The ligamentum anticum commune and ligamenta intervertebralia are much more frequently affected than the posterior ligaments of the spine.

Arterial and Absorbent Systems, &c. When distortion of the spine has produced the oval conformation of the chest, the heart and its vessels are pushed from their natural situations, and the circulation is consequently deranged, whilst palpitation, in some instances, ensues, with other phenomena, inducing the erroneous supposition of organic disease of the heart.

The functions of the lungs, stomach, and other viscera are indeed often deranged, and various are the anomalous affections resulting as a consequence. Indigestion, asthma, hepatic derangement, and "an appalling catalogue of maladies," are the natural attendants on spinal deformity and disease.

Etiology. It has been laid down before, by our author, that spinal curvatures depend on ulceration or absorption of the vertebræ. But then we are to inquire what is the cause of this caries or absorption? Scrofula appears to be the great remote or predisposing cause, while contusions, falls, or sprains, may excite the disease into action. Rickets, syphilis, rheumatisms, &c. may also be enumerated among the causes of spinal disease.

Here Mr. Bampfield enters into an examination of the opinions of Dr. Edward Harrison, who is well known to look upon relaxation of the ligaments as a fertile cause of spinal distortions leading, in fact, to luxation or subluxation of the vertebræ. Our author distinctly denies "that either permanent curvature of the spine, or luxation of the vertebræ, is caused by relaxation of the vertebral ligaments." His reasons for this denial are, *first*, because the joints of the spine are secured, not by one, but by many ligaments—and dissection has not disclosed to Mr. Bampfield that relaxed condition of the vertebral ligaments, which could be justly considered the cause of curvature of the spine. *Secondly*, he maintains that relaxation of ligament, if it did exist, would not cause spinal curvature, so long as the bodies of the vertebræ and the intervertebral substances preserved their natural dimensions—"and this they could and must do, if the disease be confined to relaxation of ligament." *Thirdly*, if this relaxation of ligaments were the cause, the bones ought to be as readily replaced as displaced, the same as is observed in the ankle-joint. But this is not the case; for Mr. Bampfield has never seen an instance of permanent curvature of the spine, in which the projecting and arched bones could be reduced, at once, to their proper spinal line, by any force or means whatever. *Fourthly*, when several of the bodies of the vertebræ are destroyed, what powers prevent the spine from separating or dividing at this point?—The answer must be, says Mr. Bampfield, that there is no other competent power than the ligaments, assisted a little by the muscles. *Fifthly*, if the spinal ligaments were relaxed and elongated, the practice of forcible extension of the spine by machinery would be very injudicious and pernicious, as it would tend to loosen and elongate them further—"yet the physician alluded to always

rature; the muscles exchange their plump and firm feel, for a softer one, and their power daily decreases. The patient will often sit with his legs crossed, and in bed will sometimes experience pains in his knees, and convulsive actions of the muscles of the thighs, which are more particularly felt and described by the adult, whose loss of muscular power is more generally accompanied with a sense of coldness and diminished sensibility and firmness of the extremities. If a palsy of the lower limbs be now induced, there is of course an end to locomotion; the muscles and cellular texture of the extremities waste and wither; the limbs become flaccid and cold, and, if lifted up, will fall down like a mass of inanimate matter; the joints are more rigid than in ordinary paralysis, and the skin frequently retains some power of sensation." 12.

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"It might have been previously mentioned, that when the curvature is extensive and the back very weak, a slight lateral curvature is sometimes superadded to the excurvation, which in these cases sometimes becomes double; the lateral curvature in this instance seems to arise from the patient seeking to rest or support

himself, when sitting or standing, by leaning to one side, after he finds himself weary or fatigued from inclining forward. When the double excurvation occurs, the first curve is formed by the dorsal vertebræ, and the second, which is always very slight, by the lumbar vertebræ." 28.

So much for the distortion of the bones. We next come to their destruction. This, Mr. Bampfield observes, is accomplished in two different ways—presenting after death dissimilar appearances. One mode is by caries or *ulcerative* absorption—the other by *simple* or progressive absorption. Caries of the bodies of the vertebræ is, in general, the result of that slow scrofulous inflammation which peculiarly invades the cancellous structure of these, and the articulating extremities of other bones; in which case, the remaining portions of the bodies of the vertebræ are often soft, so as to be easily divided with a common knife. Caries also ensues from common chronic inflammation, in which case, the portions of the vertebræ contiguous to the carious part are unusually vascular, and of a dark colour, but they preserve their natural texture and hardness.—The bodies of the vertebræ are destroyed in the most irregular manner, as the drawings found in works, and the specimens in anatomical collections, amply illustrate. Carious vertebræ often produce inflammation of the soft parts contiguous, terminating in suppuration.

"Hence, abscesses are formed, which first collect opposite the carious vertebræ;—if these should be the dorsal, the abscess will collect in the posterior mediastinum, and the pus may separate the pleura from its natural adhesions, and by pressing on the lungs occasion inflammation of the pleura, and distressing dyspnœa; or it may burst into the thorax and occasion death. If the lower dorsal or lumbar vertebræ be the seat of caries, the collection of pus may insinuate itself between the crura of the diaphragm, may separate the peritonæum from the diaphragm or its other natural adhesions, or it may penetrate through the peritonæum among the intestines, and excite peritonitis that may terminate in death. The collections of pus, even when as high as the upper part of the posterior mediastinum, sometimes gradually insinuate themselves along the spine, and present anteriorly in the course of the psoæ muscles or of the spermatic chord, or these abscesses may take an outward direction and break posteriorly on one side or the other of the vertebræ, so as to become what are strictly denominated lumbar abscesses." 31.

"The destruction of the bodies of the vertebræ by progressive absorption is effected in a different manner from that by caries or ulcerative absorption. Progressive absorption is always begun and continued on their horizontal surfaces, and proceeds in an oblique direction from the anterior to the posterior parts of their bodies, so that if the disease be suffered to run its course without interruption, the bodies of the vertebræ are first reduced to a cuneiform

shape, and are then rendered thinner and thinner, until they are wholly absorbed, and as this process is, in general, the consequence of unnatural pressure, the intervertebral cartilage becomes absorbed previously or contemporaneously with the bone. By this process, I have seen, on dissection, the bodies of five vertebræ entirely destroyed, and that of another partly absorbed. I have also seen the whole of the dorsal vertebræ and intervertebral cartilages reduced more or less into the cuneiform shape by this process, without the integrity of the joints being done away with. In instances of more limited disease of this nature, only two or four vertebræ are reduced to this shape. No abscesses form in cases of disorganization from the action of the absorbents. In such, it is probable, the bone is less solid than natural, or its organization so imperfect as to render it liable to absorption." 32

The curvature is in an inverse ratio to the number of vertebræ destroyed, being more acute or projecting when there are two or three, than when there are four or five destroyed. It is curious that the posterior surfaces of the bodies of the vertebræ forming the anterior part of the spinal canal, are almost always the last to yield to, or be destroyed by, the ulcerative or progressive absorption, and generally escape so far as to leave a bony continuity to that part of the canal. Nature, however, is sometimes reduced, as it were, to the necessity of uniting several spinous processes by anchylosis, to maintain the said bony continuity, and insure a competent defence to the medulla spinalis.

The ribs become deranged in form and structure, in proportion to the extent of the excurvation. The sternum generally projects forwards. The right side of the chest is usually more malformed than the left, but the false ribs are seldom implicated.

Affections of the Spinal Canal and Contents. If the curvature be formed during the growth of the body, the calibre of the spinal canal becomes contracted in size, at the part where it passes through the curved vertebræ. But its interior surface is generally preserved smooth and continuous—"by such wonderful powers does the Creator protect and preserve vital parts." When the excurvation has arisen in an adult, and where the growth has been completed, the above-mentioned diminution of calibre in the spinal canal has not appeared in the dissections which Mr. Bampfield has made. The foramina on the sides of the vertebræ, for the passage of the spinal nerves, must necessarily take the situation of the vertebræ, and though occasionally diminished in size, like the part of the canal with which they communicate, he has never found them obliterated or destroyed. The anomalous symptoms caused by derangements of the spinal chord would be endless to enumerate.

been the best guide in forming a diagnostic opinion, so much worse is it in curvatures with caries than without. The inflammation, ulceration, or gangrene of the intervertebral substance have appeared to me to be attended with more local pain and tenderness, and more general suffering than caries of the bony structure, and the ulceration of the anterior spinal ligament is sometimes longer deferred in the latter case, but, when induced, abscesses are the result, which generally terminate in hectic fever, emaciation, and death.

"There are not any early symptoms which may be pronounced *certain* diagnostics of a predisposition to curvature, or of an incipient curvature; when, however, a patient complains of any pain in the course of the spine, attended with a sense of constriction across the epigastre, and an occasional feeling of numbness or twitching of the upper or lower extremities, and is relieved by bending backwards, or to one side, or by lying down; suspicion should be roused and the back should be inspected. If any disease should exist, the dorsal muscles are generally wasted; if any degree of curvature exists, the projecting spinous processes will demonstrate it; if of inflammation, pressure, and the application of the hot sponge will excite pain. In curvatures without inflammation or caries, the hot sponge as often affords ease or comfort as it produces any other sensation.

"In an incipient excurvation, the undue prominence of any of the vertebræ, or rather of their spinous processes, will be most displayed by bending the body forwards, in which position any unnatural projection becomes evident." 90.

Treatment. In respect to the prevention of spinal curvature, it is remarked by Mr. Bampfield that, where rheumatism, strains, or contusions are in operation towards the production of the disease, the recumbent posture will be the surest preventive—and the same may be said of malposition; but *then* the recumbency should be alternated with suitable exercise of the muscles. "Generally speaking, says he, in all cases of incipient curvature, the recumbent posture should be much adopted, with such a degree of exercise of the dorsal muscles, as each particular case will admit of."

Where inflammation is present, exercise, of course, is injurious. In short, the general indications may be stated as follows:—*first*, to give the vertebral column effectual relief from pressure—*secondly*, to secure the bodies of the affected vertebræ from the irritation of motion in the erect attitude—*thirdly*, to assist the vertebral column in regaining its true spinal line—*fourthly*, to obviate occasional symptoms, rectify disordered functions, and promote the general health.

The *first* indication or object is evidently to be sought for in the recumbent posture, either on the inclined or horizontal plane. As it requires no mathematical demonstration to prove

that the superincumbent weight is more effectually taken off the spine by the latter than by the former, so the horizontal position is the one preferred.

The second indication is to be fulfilled by abstaining from all movements and positions, *whilst recumbent*, which throw weight on the bodies of the vertebræ. At the same time experience shows that different positions of the body can be adapted to different forms of curvature "with striking and peculiar benefit." Mr. Bampfield employs three positions of horizontal recumbency, viz. on the back, on the abdomen, and on one side.

Excurvation. The general indications are all to be observed in this variety of curvature. Our author's experience, he avers, has proved to him that the *facial horizontal position* possesses infinite superiority in this variety of curvature, and he is surprised that reasoning, *â priori*, had not sooner led to its adoption. As this is an original proposition of Mr. Bampfield's, we shall allow him to speak for himself.

"When any one in health is lying on the facial horizontal position on a soft medium, for instance, a feather bed, the vertebral column, partly by its absolute gravity, falls or inclines inwards more than in any other natural position of the body, and forms a graceful inward curve of the lumbar and lower dorsal vertebræ, and should the vertebræ just mentioned be those involved in the curvature or angular projection, (as they frequently are,) or should this portion of the spine entirely form either of those distortions, this position will of itself tend to diminish the curve, and restore the column to its spinal line. Should the greatest point of outward projection be in the lumbar vertebræ, the facial horizontal position puts the flexor muscles of the thigh on the stretch, which tends to draw the lumbar vertebræ inwards. By this position, the horizontal surfaces of the anterior portions of the vertebræ will be separated to the greatest possible distance, to be effected from particular positions, by which, pressure will be effectually taken off from those portions; irritation removed; and an opportunity for regeneration of bone and intervertebral substance, as well as of its expansion, be afforded. This position enables the patient to exercise the muscles of the back, by moving the head backwards and forwards, or in any direction, by a very limited motion of the upper vertebræ, and by playing with the legs, without counteracting the two first general indications, by creating any pressure on the bodies of the vertebræ, and thus renders exercise of the dorsal muscles compatible with rest in the recumbent posture. And as excurvation is often remotely caused by an atony of the dorsal muscles; as physiologists infer that the development of the power of muscles is in the ratio of their exercise, and as it is a pathological fact, that muscles sometimes waste and lose their strength

from inaction during disease, the importance of the moderate exercise of the dorsal muscles is manifest.

"In this position, the patient has the free use of his arms, and can raise himself on his elbows, by which latter movement the scapulæ are pressed backwards from their new lateral situations, and directed to their natural site on the back, and during this position, if the head be bent backwards, the spinous processes, (separated in this complaint in the middle of the curve,) and the posterior portions of the vertebræ are pressed more closely on each other, by which the spinous processes are approximated, the curvature diminished, and the anterior horizontal surfaces of the vertebræ still more relieved from pressure by their further separation.

"In this position, extension of the column, by pulling at the arms and legs, can be conveniently accomplished at all times, as well as pressure made on the projecting vertebræ. This position renders friction, percussion, and shampooing available with convenient facility, and the management of issues, blisters, and setons, less troublesome and painful.

"When this position has been observed about three months, it has followed in all cases, where the patient has not been pot-bellied, or abdomen corpulent, that the spinal line, which, previously to its use, was evidently posterior to the natural axis in almost the whole extent of the spine, is gradually altered, and transferred, so that the line of the lower dorsal and lumbar vertebræ become placed anterior to it, and when the patient assumes the erect attitude, the upper part of the body no longer stoops forward, but falls backwards, and the patient can walk erect, with the lower part of the spine inclining inwards." 99.

Our author remarks further, that, if the ribs have assumed the oval form, so that the patient is what is called *chicken-breasted*, the sternum, while lying in the facial horizontal position, is pressed towards the vertebræ by the whole superincumbent weight of that part of the body, and the ribs consequently pressed out on their sides, which tends to reduce them from the oval to the circular form. Lastly, the patient is permitted to lie comfortably on a soft feather bed, where he can amuse himself, "and enjoy a considerable freedom of movement." Mr. Bampfield makes several objections to the dorsal position on an inclined or horizontal plane, among which is stated the pressure made by the said plane on the projecting part of the excurvation, which, in some instances in his practice, could not be borne. The weight of the viscera also is an objection, in his mind, to the dorsal position, especially where the anterior spinal ligament or anterior portion of the vertebral bodies is inflamed. When the patient lies immoveably fixed on the back, the dorsal muscles are entirely deprived of motion and exercise—and consequently of the means of acquiring any degree of the strength which exercise communi-

cates. In this position, no friction, pressure, &c. can be applied to the spine. Many other pros and cons respecting the dorsal and ventral positions are stated by our author, for which we must refer to the work itself.

Mr. B. observes, that, after the facial horizontal position has been kept three months, in conjunction with proper mechanical means, it very commonly happens that the spinal line of the lumbar and lower dorsal vertebræ becomes transferred anteriorly to the natural axis of the body, and when the patient is placed in the erect attitude, he no longer stoops forward as he did previously. When this change takes place, the patient should lie alternately on the dorsal and facial horizontal positions, by which the column will soon regain its natural axis.

The recumbent positions above mentioned will be materially aided, in some cases, by mechanical extension of the vertebræ—by occasional pressure on the outer line of curvature —and by the application of certain apparatus. It is evident, however, that when a portion of spine becomes anchylosed through the whole surfaces of the diseased vertebræ, or in its posterior part alone, all efforts to alter its form will fail, and would be improper—hence cases of many years' duration are incurable.

The mode of employing extension and pressure is various. In the incipient stage, extension may be made by machinery, while the patient lies in bed, and pressure may be applied by the hand covered with a glove. Friction, shampooing, or percussion, alternately or in succession, may be used for an hour, by the nurse or parent of the patient, before the professional visit of the surgeon.

"After friction, extension, and pressure have been employed, the apparatus of a compress, a quilted pad, made of what ladies call wadding, covered with silk or cotton, and a shield placed over the curvature, and secured by a long, broad bandage, rolled round the thorax, should be applied, as the patient lies on the pillows, which is the most eligible method, or he must be raised on his knees and elbows, so as to form a space under him that will allow free liberty to pass the bandage with the hand:—The bandage should be rolled as much as possible during expiration, when the ribs are not distended or raised; because the bandage would be then firmer, and because the power of inspiration, by raising the ribs, would tighten the bandage on the projecting sternum and vertebræ, and be almost a natural means of mechanical pressure.—Should inflammation of the vertebræ be present, attended with pain, or if the mechanical operations excite pain, in any degree, much complained of, they must be suspended or desisted from, until the inflammation has subsided, and the operations cease to occasion pain." 112.

Experience, Mr. Bampfield avers, has fully convinced him that the "*indiscriminate* and general use of issues and setons, which ensued on the publication of Mr. Pott's essay, may be dispensed with—because the cases in which they are not necessary, are more numerous than those in which they are."—Until experience has laid down an unerring guide for their employment, Mr. Bampfield hazards a conjecture that issues and setons will be beneficial in the cases "where scrofula is the occasional cause, during the period of scrofulous inflammation, ulceration, or caries." They are not necessary, and may be injurious, where the curvature depends on progressive absorption. Not so in disproportionate growth of bone, and in excurvations of the spine. In these they are often useful, especially the latter, which are frequently attended with inflammation or caries. Upon the whole, of the two plans of Pott and Baynton, Mr. Bampfield has witnessed more and speedier recoveries, from the former (issues and setons) than from the latter—motionless dorsal horizontal position. We now come to the medical treatment.

"In the incipient stage of curvatures from muscular debility, especially in children, chalybeates have been prescribed with much good effect, with an occasional laxative of pulv. rhei. twice a week. In this stage, local cold bathing has been useful, by applying cold water with a sponge to the back, during winter, and by cold affusion in the summer, provided there is no diathesis to pulmonic complaints, which would interdict its use. To recover or ensure the general health, the plainest diet, at regular intervals, should be enjoined, and yet the appetite preserved by a well managed variety of simple food. The digestive organs are frequently deranged, and dyspepsia, obstipatio, and pain in the epigastric region prevail. The digestive functions have been strengthened, as well as the whole system, by obviating costiveness with rhubarb, or a combination of p. rhei, pl. hydr. et pulv. ipecac. and the exhibition of chalybeates, or the stomach bitters, with soda, or other alkalies. The peculiar pain across the epigastre sometimes requires opium for its relief; this pain and screaming in sleep, I have known removed by occasional purgatives.

"When the action of the kidneys is morbid, as may be inferred from the urine being scanty and turbid, and depositing lateritious sediments, it has commonly been restored to health by the use of magn. carb. sodæ carbon. with stomachics and gentle aperients.

"The peculiar pain of the epigastre, nervous irritation, and irregular spasms, perhaps from the spinal nerves being somehow disordered, by the tortuous direction the spinal marrow is obliged to assume, have generally yielded to the above remedies, surgical and medical, as have also paralysis of the lower extremities and incontinence of urine. In paraplegia, friction on the skin, flexion, and extension of the limbs, and warmth, have been used in aid of the above treatment. The different pulmonic affections must be treated by the remedies ordinarily employed in asthma, pneumonia,

and cough. It may be observed, that asthma sometimes induces general dropsy in a short time, with purple-coloured lips, cheeks, feet, &c. and is frequently fatal to those whose spines and chests are much distorted. The milder attacks of asthma are sometimes greatly relieved by the vapour-bath, used with the other remedies. The observance of the facial horizontal position diminishes the frequency of recurrence of asthmatic paroxysms, and combined with the use of the bandage, has the most decidedly good effect in relieving harassing dyspnœa. Scrofula must be combatted by appropriate remedies adapted to the different stages and symptoms of disease. In the inflammatory stage, frequent local bleeding, blisters, and setons, have been found useful during any accession or return of pain, with very slight alteratives at night, and a gentle hydragogue aperient in the morning, continued for a long period; when abscesses, or ulcerative absorption or caries are induced, and accompanied by emaciation, the bitters, sulph. acid and cinchona have their advantages. I have seen cases of curvature of the spine, in which scrofulous ulcers and abscesses of the joints of the extremities have been formed, and in which tonics and alteratives have proved highly beneficial, as well as the sulphuric acid. When the bladder loses its expulsive power, the catheter must be used until it regains it." 118.

Under proper management the state of the curvature and of the general health often undergoes considerable amelioration in the course of a month. But the change from the constant use of the recumbent posture to that of erect attitude should be gradual, " and the treatment should be divided between exercise in the erect attitude, gradually increased, and rest."

" When the destruction of the horizontal surfaces, or bodies of the vertebræ, has been produced by progressive absorption, although the regeneration of bone may have been prevented for years, by the patient remaining subject to the effects of pressure and of motion, by continuing to sit up and walk about; yet, soon after the patient is confined to the proper horizontal posture, by which rest is secured and weight taken off, the formation of new bone begins, and proceeds both anteriorly and posteriorly in the following manner, if it be allowed to deduce such an explanation of the arrangement from the observations made on the appearances presented on dissection. In the posterior portions of the vertebræ, the connecting ligaments of the spinous processes are successively converted into cartilage and bone, as are sometimes those of the oblique processes. Anteriorly, if the bodies of the vertebræ have been removed by progressive absorption, which generally leaves the anterior spinal ligament entire, depositions of cellular fat (sometimes) and then of bony matter take place on the ligaments, which gradually increase, until they fill up the chasm formed between the remaining vertebræ, and become united to them, and, during this process, the ligament itself becomes ossified. When the horizontal surfaces only have been absorbed, and not the entire bodies, the formation of callus may ensue from the surfaces,

and wholly fill up the chasm, provided all pressure be kept off and motion laid aside during its formation, as is done in cases of fractured bones, on the same principle of propriety and necessity. If the destruction have proceeded from caries, more particularly scrofulous caries, the perfect regeneration can seldom commence before the scrofulous action has ceased, and the spine is placed in a favouring situation; ossification also proceeds differently, for the vessels form granulations that become ossified from the surfaces of the bones, bounding the upper and lower part of the spinal chasm, which approximate, and by degrees consolidate, and produce a bony union." 122.

In this, as well as in other species of curvature, active exercises of the muscles situated on the posterior part of the trunk, and on the anterior parts of the thorax and neck, can be advantageously employed in the incipient stages of deformity, and in the advanced stages of recovery, when the disposition to disease is corrected, and the vertebræ are sufficiently firm to bear the superincumbent weight—provided always, there is no inflammation of the vertebral joints present. The modes of exercising the muscles have been already adverted to, while reviewing the various works on the spine, and need not here be repeated. For many judicious remarks on instruments, exercises, and apparatus, we refer the reader to Mr. Bampfield's work, from page 127 to page 156.

Incurvations of the Spine. These are less frequent than excurvations, and do not describe such large curves. They are rarely attended with such serious consequences as the other curvatures. Incurvation is formed by a gradual and regular bend inwards of the vertebræ affected, presenting the appearance called "*hollow backed*"—and dissection shows such vertebræ of a greater thickness on the anterior than on the posterior parts of their bodies.

"In the lumbar and lower dorsal situations, it is sometimes caused by the gradual contraction of the flexor muscles of the thigh, induced during the existence of lumbar or psoas abscess, for the patients so affected are almost sure to assume and indulge in the bent position of the thigh; or this position may be involuntary, and the contraction the pure effect of disease; in either case, the contraction draws the vertebræ inwards, (more particularly when the weight of the extremity is depending from the muscles,) and the thigh upwards, so that, in truth, the muscular contraction should be regarded as the primitive disease in those instances, and the incurvation as an effect. Lumbar incurvation sometimes arises from carrying very heavy weights on the head, or suspended from the neck. One extremity becoming shorter from diseased hip-joint, has also led to this incurvation. It has also arisen from an increased and disproportionate growth of the anterior portions of the bodies of the vertebræ. The cervical in-

curvation is sometimes caused by large heads inclining backwards, and chiefly produces inconvenience and disorder by its pressure on the œsophagus, rendering deglutition difficult, and extending to the trachea, so as to affect respiration in some degree. It is also occasioned by rickets." 158.

Treatment. In all cases of incurvation, the dorsal horizontal position is considered by Mr. B. as the most proper. If it be in the cervical vertebræ, the chin should be drawn in towards the neck, which tends to throw the cervical vertebræ backwards. If in the loins, the flexion of the thighs tends to remove it—but this flexion should not be constantly employed.

Lateral Curvature. This disease, Mr. B. observes, almost universally occurs *during the growth of the body*, and is almost as common as excurvation. It rarely occurs in infancy or after the adult age. The first deviations of the spine to either side are seldom observed, and the first symptom that usually attracts attention is the elevation of one of the shoulders, or depression of the other. When noticed, from three to five of the spinous processes may be seen to form a gradual and slight curve to one side, more especially when the patient is standing or sitting upright. This curve almost always begins in the middle of the vertebral column, bearing a resemblance to the italic *f*; and in this state can frequently be reduced to the spinal line by recumbent posture and extension. Symptoms of nervous irritation and derangement are far from common at the commencement of lateral curvature, "nor indeed do they constantly occur at any stage of the progress of the distortion." It is well known that one curvature produces another in the opposite direction, in consequence of the effort made to preserve the equilibrium of the body. Lateral curvatures are formed by slow degrees; but here, as in excurvations, if the patient be assailed by any acute disease, as a fever, or any of the exanthemata, inducing debility, the progress of the curvature is accelerated rapidly until the strength is regained.

"If an original disproportion of growth of the bones of the vertebræ do not primarily give rise to any lateral curvature, an artificial disproportion of the thickness of the sides of the vertebræ ensues as soon as any degree of curve is formed, and increases with its increase. The bodies of the vertebræ and the intervertebral substance are gradually reduced to a cuneiform shape in different degrees, and are consequently diminished in thickness on the concave side or inner line of the curves, and are, for the most part, preserved of their natural dimensions on the convex side or outer line of the curves, and the dimensions of the vertebræ, and inter-

vertebral substance in the centre of those curves exhibit the greatest disproportion. The middle or dorsal curve includes about eight of the upper dorsal vertebræ, and sometimes the whole; the upper or cervical curve is generally formed by the cervical vertebræ alone; the lumbar or lower curve as frequently implicates three, four, or the whole of the lumbar, and about four of the lower dorsal vertebræ.

"In some cases, the two lower lumbar, and some of the cervical vertebræ maintain their spinal line. In the advanced stages of lateral curvature, the distortion is not confined to a mere inclination of the vertebræ to the sides as the name implies, for the dorsal portions of the curved spine take a tortuous or serpentine direction, by which its spinous processes, instead of projecting directly backwards as usual, are twisted to one side, and are directed more to the concavity of the curve, than the convexity.* The effects of this spiral turn of the dorsal vertebræ are remarkable, and greatly contribute to increase the deformity; for, by it, the transverse processes and vertebral ends of the ribs are turned obliquely backwards on the convex side of the curve, and are advanced obliquely forwards on the other side; the ribs, on the side they are turned backwards, form a hump, projecting from half an inch to two inches and a half, posteriorly to the spinous processes of the dorsal vertebræ, and in the untoward turn and longer curve they are obliged to take to arrive at the sternum, they sometimes closely approximate or actually touch the lateral portions of the bodies of the vertebræ." 170.

Mr. B. avers that instances of carious vertebræ in this variety of curvature are very rare, and where they have occurred, "the caries has been occasioned by scrofulous action, which has extended to the intervertebral cartilages and ligaments, and excited an ulcerative action in them," inducing the necessity for anchylosis, as in excurvation. In the generality of cases, he observes, the integrity of the joints is preserved, and their articulations are so distinctly maintained, as to allow of considerable motion in all directions, with the body bent to one side, or curved in different directions to both.—These lateral distortions necessarily occasion considerable changes and derangements in the muscles situated on the trunk. From the shortening of the ribs, and from their being situated in closer contact, or actually anchylosed on the concave side of the curvature, the capacity of the thorax on that side is diminished, and the lung it encloses is necessarily prevented from developing itself and arriving at its natural size, whilst the lung on the convex side of the curvature is frequently much compressed by the too close and unusual approximation of the ribs to the bodies of the vertebræ on that side. Hence a free expansion of the lungs in inspiration cannot be effected, and

* "Dr. Dods has recently devoted a volume to this variety of lateral curvature under the name of rotated or contorted spine."

the patient suffers from difficult respiration, and disordered pulmonary circulation. The calibre of the spinal canal is frequently contracted about the centre of the curves, and is sometimes diminished to one half of the natural size. Although diseased action is not frequently set up in the medulla spinalis or its membranes, yet irritation is sometimes propagated to them from the bones, when they are carious, or otherwise diseased.

"The medulla spinalis is necessarily diminished in its volume, in that part of it which occupies those portions of the spinal canal lessened in its calibre. Its fibres are not of one uniform length, as they must be longer on the convex side of the curve than on the concave. The nerves proceeding from the medulla spinalis are sometimes smaller, even by one half on the concave side of the curves than on the convex, and hence it may be fairly inferred, that the organs, bones, and muscles, deriving their nervous influence and energy from such diminutive nerves must be deficient in both, and the actions which depend upon them must be defective. The nerves must take unnatural courses, and be shorter or longer than natural, as they happen to proceed from the concave or convex side of the curves.

"In the generality of cases of lateral curvature, there is not any pain complained of in the course of the curves, nor is any felt or excited by pressure; nor is the power of the muscles so much weakened in general, as in excurvation. Yet, when scrofulous irritation and inflammation, with the results described in the last paragraph, are experienced by the bones and medulla spinalis, pain is felt in the course of the curvature; spasms of the extremities and diaphragm take place; the muscles of the extremities become disobedient to the will, and the patient cannot walk steady, or the muscles may become paralytic;* obstinate constipation ensues; incontinence of urine and fæces casually happens; dyspnœa with a sense of suffocation occurs; the irritation of the medulla spinalis is communicated to the nerves united to and proceeding from it, and various nervous symptoms and feelings are induced; in young females, hysteria sometimes takes place, and the menstruation is painful or suppressed;—this latter event is, however, more common in excurvations, as should have been observed. It may be stated, that Mr. Lloyd relates a case of lateral curvature attended with lumbar abscess.—*p.* 258, *on Scrofula.* This is an uncommon occurrence." 178.

In numerous cases of lateral curvature the general health is not much impaired, during the formation of the curvature, unless scrofula be present. Permanent lateral curvature, however stunts the growth, especially of the lower extremities, probably from the diminution of the nerves proceeding from

* "It has been observed by many authors, that the condition of the muscles in the paralysis from diseased spine, differs from that in ordinary palsy, and that the muscles are not so soft, but the joints are more rigid."

the spinal marrow. In the progress of this complaint, some degree of *excurvation* occasionally arises.

"The remote Causes of Lateral Curvature are rachitis, or disproportion of growth of the sides of the vertebræ; unequal length of the lower extremities; undue pressure on one side of the vertebral column from carrying heavy weights on one arm, by which the spine is bent to one side; an inclined position of the body to one side long continued; muscular debility; rheumatism of the intercostal and dorsal muscles; abscess on the side of the neck or trunk; scrofula; tumours. Is unequal action of the dorsal muscles a cause?" 180.

As Mr. Bampfield's experience in lateral curvature is extensive, he considers himself justified in inferring that RACHITIS is the fertile source of them in two ways:—*First*, by creating an irregular growth of the bodies of the vertebræ, which destroys their natural and relative proportions—and *secondly*, by occasioning a disproportionate growth of the lower extremities, which varies or destroys the natural centre of gravity of the body. "In most instances of spinal distortion from this cause, unequivocal appearances of rickety growth and deformity have displayed themselves in the bones of the upper or lower extremities." Mr. Bampfield has seen some instances of incipient lateral curvature produced in young females who were employed, during their growth, in carrying and nursing children, when their strength was inadequate to the burden, the weight of the child compelling them to bend. This, he thinks, is not in favour, however, of the tenets of some recent authors "that an inequality in the bulk of the arms, and of one side of the body, combined with the more constant use of one arm, will produce lateral curvature, by drawing the body down on one side, which causes other portions of the column to be bent in the opposite direction, to preserve its equilibrium." Mr. Bampfield has seen instances of lateral curvature produced by a habit of long-continued inclination of the body to one side, after the adult age, in insane persons. In the young and growing this is a more common event. Some eminent artists in London are distorted from this cause—malposition.

"Young ladies and boys who sleep two in a bed are apt to lie always on the same side of the body and bed, and become liable to lateral curvature from this cause, as are all young persons who sleep constantly on one side, with the side of the head and shoulder resting on pillows, as in that position, the spinal column is bent into the lateral curve. Young persons who always sit on the same side of a fire or window, are also liable, by acquiring a habit of leaning to one side." 184.

Of all the causes of lateral curvature, Mr. B. observes, none has been so generally and popularly received as—"the unequal

action of the dorsal muscles." He thinks the abettors of this doctrine have assumed the facts without any proof. No explanation has yet carried conviction to his mind. It cannot, he avers, be demonstrated that an unequal power exists in the dorsal muscles. The circumstance of there being double or triple lateral curvatures, in different directions, is adduced by our author, as a proof that this inequality of power in the long muscles of the back is a chimera of the imagination.

"I have observed the condition and action of the dorsal muscles in the earliest stages of lateral curvature, attended with muscular debility; and the following were the phenomena they represented. After the patient has kept the spine erect, until the muscles are fatigued, the spinal column suddenly sinks down, and bends to one side, and the patient inclines to the other, to maintain the balance. In this state, they remain quiescent." 187.

Mr. Bampfield accuses some fashionable follies of modern education as justly responsible for this species of curvature, especially in young females—first, by establishing habits that deprive the muscles of the back of their natural exercise and actions, thus preventing the attainment of their natural strength—secondly, whilst in this state of debility, by endeavouring to subject the spinal muscles to more exertion than they are capable of using, in the injunctions they receive to keep the body constantly erect in standing or sitting attitudes.

"Thus the spinal muscles of young females are doomed to inaction, by the trunks of their bodies being imprisoned in stiff stays, or their movements abridged and confined by the use of collars, braces, back-boards, or by being stretched motionless on reclining boards, or school-room floors;—or they are subjected to long continued exertion, and the use of one posture, which all our muscles abhor, and soon become weary of, by being placed in education chairs or stools, the long forms of school-rooms, or on the round stool, to practice for hours on the piano-forte or harp, with strict injunctions to keep the body quite upright, and menaces of punishment, if they stoop or bend in the least; but the muscles must sometimes obey divine, instead of human laws, and when fatigued and weary in the erect posture, must gradually follow the Creator's law, and seek repose, by allowing the body to sink into an inclination to one side or the other, and, by laying the basis of lateral curvature, produce the reverse of what human wisdom intended." 188.

We fear Mr. Bampfield's strictures on the management of schools are too severe—and his plans of improvement, somewhat Utopian.

"Without digressing further, I would observe, instead of stiff stays, back-boards, reclining boards, education chairs without

backs, military marching, &c. let the boys and girls have *no clothes* or apparatus to limit their movements, and when weary, let them sit down on chairs with proper curved backs to support the spine, or lie down for rest, or, in fact, seek repose as they find most agreeable, when they are fatigued, or can no longer maintain an erect attitude conveniently. Let the girls have *a large field* or play-ground, let the boys, also, have *the range of the country*, within the sound of the school-bell. Let the girls engage in the games of battledore and shuttlecock, skipping, dancing, and *all that they can play at*. Let the boys play at cricket, trap and ball, shinney, fives, skipping, running, coits, marbles, climbing trees, jumping, &c. and we shall not have many distortions of the spine; and, without intending to give offence, I will venture to express an opinion, that if the amount of a captain's pay was laid out for the use of the boys at the military asylum, in the purchase of cricket-bats, trap and balls, skipping-ropes, swings, shinney-sticks, marbles, coits, &c. there would not be any occasion for exercise-masters, or surgeons to cure deformities, unless arising from scrofula or accident." 191.

The *immediate* causes of lateral curvature are the same as of permanent spinal distortion in general—" and will be found in the morbid alteration of structure of the sides of the spinal column, producing such a disproportion between them, as renders it impossible to restore it at once to perpendicular figure, and retain it in its true spinal line." This alteration, he thinks, is rarely effected by scrofulous caries, or ulcerative absorption on one side of the bodies of the vertebræ—and when it is produced thus, the curvature is generally single, and the scrofulous caries only affects one or two vertebræ. Scrofulous inflammation and ulceration, as was before observed, generally attacks the whole horizontal surfaces of the vertebræ, and produces *excurvation*, to which some lateral curvature is occasionally added. " The ordinary lateral curvature (to which the one just mentioned is a rare exception) affects many vertebræ, and is produced by progressive absorption, or by an undue growth of bone combined with it." The same mode of explanation is here used by Mr. Bampfield as was made when treating of excurvation. It has happened in his own practice, however, " that more cases of lateral curvature have originated in a disproportionate growth and length of the lower extremities than from any other single cause." This circumstance, he thinks, has not been sufficiently noticed by surgeons. The disproportion varies from half an inch to two inches and a half, and arises, he imagines, either from an extraordinary development and growth of one extremity, the diminutive growth of the other extremity—or from the ankle or knee joints bending, so as to cause one to be shorter than the other. The former is the more common cause, as the latter frequently exists

without producing curvature. The *modus agendi* of these causes is so obvious as not to require a word. Indeed the principal fault which we have to find with Mr. Bampfield's work is the unnecessary explanations so often and so fully given.

"Patients affected with lateral curvature seldom lose their lives, even when the disease has been left to nature, unless scrofulously affected. It, however, permanently occasions dyspnœa and asthma, and the health of the subjects of this curvature is generally delicate, and easily disordered, but there are many exceptions to this observation, and, aided by a guarded regimen and regular habits, a good share of health may be enjoyed by those doomed to endure for ever this deranged structure." 199.

The section on "the dimensions of the vertebræ and ribs, in some specimens of lateral curvature," we must pass over, as it is illustrated by figures and wood-cuts, which must be seen with the eye to be understood.

Treatment of Lateral Curvature. Our author comprises under two heads the consideration of this important subject. 1st. Where the curvature arises from disproportionate length of the lower extremities—and 2dly, where it arises from any other cause except this. In the first case, it is evident the cause must be removed before the effect can be expected to cease. The treatment in these cases must consist, principally, in the adaptation of mechanical apparatus to equalize the positions and movements of the body. These need not be explained. Exercise and rest alternately, with tonics and regulation of the digestive organs, must be resorted to as auxiliaries to the apparatus.

Issues or setons can be of no use in this species of curvature.

When the curvature has arisen from an *irregular and disproportionate growth of the vertebræ*, "which rickets so frequently disposes them to assume," our author has attempted to remedy the incipient stages by the exercises so highly extolled by various authors; but not with the success he expected—in fact, he says, they "have decidedly failed," so that he always adopts the recumbent posture, and denies the patient the privilege of sitting up, allowed in lateral curvatures from other causes.

"If then it be admitted that the comparative value of the modes of treatment be sometimes in favour of a particular recumbent posture, when the curvature arising from rickets, is in the incipient state, and the spine only deviates from the straight line into the form of an italic *ſ*, (s,) very little doubt will be entertained of its superior value and propriety, when the lateral curvature has been neglected or maltreated, from whatever cause it may arise, until it

has assumed the form of the Greek ς, sigma. For, in the latter cases, all the medical and mechanical means that reason can suggest and experience sanction, should be assiduously employed to obtain even a chance of complete success. Proper position, extension, pressure, friction, exercises in the recumbent posture, &c. are among the natural and mechanical aids. There are two positions for common use, of almost equal advantage, and they are both obliquely lateral, on a horizontal plane or couch, made for the purpose, and covered with a mattress; hence, the patient should be directed, either to lie obliquely on the side on which the ribs protrude backwards, or, in plainer words, to lie on the hump, as the superincumbent weight of the body bearing on this projection, will be equivalent to a certain degree of constant pressure, that tends to press those ribs forwards, and to direct the convexity of the spine towards the spinal line; or, he should be enjoined to lie on the face with an oblique direction to the opposite side, so that a dosser of lead, modelled in some degree to the shape of the distorted ribs or hump, and varying in weight according to age, or a bag of shot that will assume the turn of the ribs, may be laid on the projection so as to maintain a constant pressure, with the same indications as in the last position." 220.

The spine should be kept as long and as often extended, by mechanical contrivances, or by persons pulling at the extremities, as the patient can conveniently endure. During this extension, the surgeon, or some person under his direction, should employ pressure with his hands on the curved portions of the spine and projections of the ribs, for half an hour or an hour every day.

"With his thumbs placed against the sides of the spinous processes, on the convex side of the curve, he can press the vertebræ towards the spinal line, and, by laying the palms of his hands on the backward costal projections, he can press them forwards, and, by giving a lateral direction to the pressure, cause the vertebral extremities of the ribs to aid in directing the distorted vertebræ to their natural axis. Where there are two or three curvatures, a person may act on each side." 221.

Friction and shampooing he has found profitable, and they may be applied at all convenient opportunities. The patient should not be allowed either to sit or stand upright, as it is necessary to free the spine from all superincumbent weight in these cases of ambilateral curvature, as it is in excurvation.—"The particular horizontal postures recommended, should be constantly observed." It is some consolation that a variety of these postures is allowable. To prevent the spine from bending during sleep, the patient should wear a pad, or a pair of stays, at night;—"but the use of the steel-bow does away with their necessity." Every kind of available exercise in the recumbent posture should be put in force.

"Dyspnœa is a troublesome symptom in the advanced stages of lateral or ambilateral curvatures, and continues during life, if the curves be not removed; the most effectual relief I have found for it, is lying in the oblique position on the projection I have described, which tends to enlarge the capacity of the thorax and the power of expansion of the lungs, and to obviate the compression the lungs are subject to from the backward projection of the ribs and their approximation to the vertebræ." 224.

For a variety of practical remarks and ingenious speculations respecting lateral curvature, we must refer to the volume itself, from page 225 to page 238. We shall extract one more passage, however, bearing on the subject of promised cures in old established distortions, where the growth of the body is finished.

"The view I have taken of the subject is the following;—During the growth of the body, parts of the bony structure that are deficient may be supplied, and those that are redundant and disproportionate may be absorbed, and the equality of size and proportion be restored. After the growth of the body has been completed, and the curvatures are attended with unequal proportions of the thickness of the sides of the vertebræ, and of the length of the ribs and extremities; it is clear that those alterations and additions of structure, necessary to restore symmetry of form, cannot be accomplished, without the creation of a new and successive growth of the diminutive bones or portions of bone; and, as the power of such a new creation is an attribute of the Deity, who has ended his work, and does not belong to man, it is impossible to remedy the finished deformity, or materially change it; yet, there are those who impiously promise and audaciously and ignorantly attempt this new creation, and who rob their fellow-creatures of their liberty and time, by consigning them to a long and useless confinement, a motionless rest, and the stretching of machinery, in vain, to counteract the ordinations of Providence, that has given all things their bounds, and has said, 'thus far can ye go and no farther." 239.

Angular Projection. We shall not be able to dedicate so much space to this, the 9th Chapter of our author's work, as the subject deserves, in consequence of our closing limits. It is generally the 3d or 4th spinous process of the lumbar vertebræ which forms the prominent angular point in this disease. It has occurred in Mr. Bampfield's practice as frequently as either lateral curvature or excurvation. It most commonly takes place in young persons, between the age of three and twelve years.

"The projection is formed in a very gradual manner; the spinous process of the 3d or 4th lumbar vertebræ is first observed to protrude a little, or both may protrude when first noticed; and as this projection increases and enlarges, it bears out from the spinal

line, and elevates five or six of the spinous processes of the vertebræ above it, so that when the projection has made considerable progress, the lower spinous process projects beyond the spinal line from half an inch to nearly an inch, whilst five or six above are gradually inclined outwards from one of the dorsal vertebræ in its natural situation, to the extreme point of angular projection, between which and the lumbar vertebræ, *in situ*, below it, there is a space in which the fore-finger may be pressed.

"The transverse processes of the same vertebræ generally project on each side of the spinous processes, and elevate and stretch the muscles and integuments, so as to produce a bow or arch from side to side, which is supported in the middle by the spinous process. The sternum sometimes projects a little, as in excurvation. In the majority of cases, the muscular powers of the back and of the lower extremities are gradually weakened; but in some cases no loss of power is evident. The patients in general become debilitated and soon fatigued from exercise, so that they cannot walk long without seeking a resting place to sit or lie down; when the projection is half an inch or more, the patient's body is commonly inclined forwards, the act of walking is imperfectly performed in a waddling gait, or the legs cross, and the patient falls down, or the dorsal muscles suddenly lose their power, and the patient stoops forward and seeks support by placing both hands above the knees. At all times, it is customary for the patients to avail themselves of any accidental support that falls in their route. In some cases, there is considerable pain experienced in the deranged vertebræ, and, in others, but very little or none, unless they are much pressed upon, and sometimes pain is not produced by pressure.—The pains are sometimes sudden and severe, and compel the patients to throw themselves into the recumbent posture, wherever they happen to be when they supervene. Quick and sudden motions of the spine sometimes induce smart pains in the affected vertebræ. Pains of the back and of one or both knees, in some cases, disturb and prevent sleep, and compel the little patients to scream aloud. These pains generally occur in the night-time, and are often connected with, if not caused by, lumbar inflammation and abscess." 243.

Many cases of lumbar abscess are connected with this deformity. Dissection generally discloses disease of bone intervertebral cartilage and ligament. Sometimes, on dissection, the vertebræ, cartilages, and ligaments are found sound in structure, "but an unequal or disproportionate growth of bone is evident, by which the spinous and transverse processes are thrown back, and form the angular point."

In respect to prognosis, our author observes that, every case of this disease which has been placed under his care, within six months after its formation, terminated successfully—unless caused by lumbar abscess already produced.

"Cases of long duration, in which the previous symptoms

of inflammation had existed, and in which emaciation, great debility, much pain of the back and hectic fever have been induced before due surgical attention has been paid, have terminated fatally." 250.

If the lumbar pain abate—if the prevailing symptoms become mitigated—if the general health improve, the prognosis may be favourable, and *vice versa*.

"The remote causes of this species of spinal distortion are contusions of the spine; sprains of the lumbar vertebral joints; muscular debility; pressure of the cyst of lumbar abscess; a rickety growth or malformation of the bony bridge; and, more frequently than any other, scrofulous or common inflammation of the intervertebral cartilage, and horizontal surfaces of the vertebral bodies." 251.

The *immediate* causes of this complaint are, Mr. B. avers, the same as of other spinal distortions—"structural disproportion between the anterior and posterior portions of the bodies of the vertebræ or intervertebral cartilages, or destruction of the horizontal surfaces of one or more vertebræ."

Treatment. Many of the indications of cure already portrayed for *excurvation* will apply here. Repose, in the facial horizontal position on a soft feather bed, is peculiarly advantageous, as, by this, all weight and pressure are taken off the anterior portions of the spinal column, and the progressive absorption suspended and prevented. Whenever symptoms of inflammation occur, or pain is felt on pressure or motion, topical bleeding, counter-irritation, "a daily hydragogue aperient, with alteratives," a low regimen, and perfect quietude should be enjoined. Mr. Bampfield agrees with Mr. Brodie, Mr. Copeland, and others, that in all cases originating in intervertebral inflammation (which has always a strong tendency to ulceration) issues and setons are particularly beneficial.

"After the mechanical and medical means have been attentively employed about three months, if the patient be directed to assume the erect attitude, and the spine be examined, it will generally be perceived that the lumbar portion of the spinal line is inclined forwards; when this effect is produced, and towards the end of the cure generally, lying on the back, and the frequent exercise of the lower limbs in flexion and extension, will prove advantageous, as it will tend to bring the spinal line into the natural axis of the body, and the forcible extension of the flexor muscles of the thigh will draw in the lumbar vertebræ. In the most favourable cases, there remains an apparent projection of about a quarter of an inch of one or two spinous processes, or of one or two transverse processes, which protrude a little beyond the level of the spinous processes, but this does not alter the natural axis of the body, nor

prevent the patient from standing upright, and preserving the erect attitude, and is a mark of some disproportion of growth still remaining." 260.

The last three chapters of Mr. Bampfield's work, on fractures, dislocations, inflammations, and other diseases of the spine and its contents, we must pass over—*first*, because we have already treated of those subjects in our review of Mr. Ollivier's work in the first number of this Journal—and *secondly*, because we shall shortly again have the same subject on the tapis, in professed works on those affections. On these accounts, we must now draw our analysis to a close, without touching on the Appendix of Cases in illustration of the general principles laid down in the body of the work.

As Mr. Bampfield has gone to work in a very systematic manner, availing himself of the writings of others as well as his own personal experience, he has constructed an Essay that will perhaps prove more generally useful and acceptable to the practitioner than any single work on the same subject. For certain peculiar opinions and practices, which the reader must have observed in the course of this analysis, Mr. Bampfield is answerable, and will doubtless be able and ready to reply to such objections or criticisms as his professed *spinal* cotemporaries may think proper to put forth. He has freely criticised and commented on the writings and practices of others—he must expect returns in kind. With these matters, however, we have little or nothing to do. *Criticism* is of so very little consequence, in our opinion, that we are quite indifferent whether or not it enters into the composition of the Journal at all. This, to *a few* of our readers, may seem "passing strange;" but they will probably, on reflection, give us credit for having some little knowledge of what is most advantageous to the public as well as to ourselves. Without professing, therefore, to be initiated farther than our neighbours in the "craft and mystery" of spinal diseases, we can only say, in conclusion, that Mr. Bampfield's Essay appears to us to have *deserved* the prize conferred on it by the Medical Society of London—and this, we think, is commendation enough.

VIII.

Quarterly Periscope

OF

PRACTICAL MEDICINE;

BEING

The Spirit of the Medical Journals,

Foreign and Domestic;

WITH COMMENTARIES.

I.

Physiology.

——————— latas à numine leges
Religiosa doce, mentesque cupidine veri
Allice.

1. *Acid in the Human Stomach.** The complaint of *acidity* in the stomach is so common, that it seemes wonderful no accurate investigation of the nature of this acidity should ever have taken place.—The investigation is not without difficulty, on account of the heterogeneous substances lodged in the stomach previous to vomiting, which rarely allows of a discharge of acid, of a uniform quality, so as to afford an opportunity for a fixed course of analysis. A case, however, fell under our author's observation, where he was enabled to institute a series of experiments upon this obscure subject, and the results are now laid before the profession.

A young woman, named Hutchinson, in the Hospital for Incurables (to which Dr. G. is physician) has been, for several years, subject to fits of vomiting, lasting from ten to fourteen days, and recurring at intervals of about five weeks. These attacks are preceded and accompanied by pain and tenderness in the epigastrium—constant retching succeeds, and almost every thing swallowed is instantly rejected. Her sufferings continue day and night, almost without intermission. Several pints of fluid are daily ejected—sour in smell, and so acrid in nature, as to cause inflammation and excoriation of the throat and other soft parts with which it comes in contact. This phenomenon tempted our author to try whether the fluid contained any free acid. A quantity of what she threw up in the morning was collected, and suffered to stand at rest, when it soon separated into three distinct parts—the uppermost, a red frothy

* Dr. Robert James Graves. Dublin Transactions, Vol. iv.

mucus—the middle, ropy, transparent, and of a straw colour—the lowest, similar, but mixed with a variously coloured and flaky sediment. The middle portion was selected for experiment. It instantly reddened litmus paper, the red colour not destructible by heat. With muriate of barytes it gave no percipitate; but with lime water, a precipitate of a yellowish white colour.

"Oxalate of ammonia gave a white precipitate: that from the nitrate of silver was copious, and, when exposed to the light, assumed a bluish-black colour. The precipitate from acetate of lead was copious, and soluble in dilute nitric acid: its examination with the blow-pipe seemed to prove that it contained both the muriate and phosphate of lead. When the liquor was distilled, no acid came over; what remained in the retort had become more acid, contained a good deal of coagulated matter, and, when the heat was long or continued, it finally became a thick extract, soluble with effervescence, in dilute nitric acid." 319.

These trials showed that the fluid contained mucus, a free acid not volatile—phosphate of lime, and one or more salts containing muriatic acid. Our author tried whether the fluid contained either urea or uric acid, but careful experiments negatived their presence. The probable presence of lactic acid was now suspected, and our author instituted a series of chemical experiments to ascertain this point. They are detailed at pages 320-1-2 of the work before us, and to these we must refer for particulars. It is sufficient to say that these experiments, in our author's opinion, fully identify this acid with the lactic acid—and that it differs materially from the acetic acid with which it has been often confounded, inasmuch as it may be evaporated to dryness, re-dissolved, and this operation several times repeated, without any considerable loss of acid, while the acetic acid, on the contrary, is extremely volatile.

"As all the fluid vomited by Hutchinson during twelve days possessed the property of instantly and decidedly reddening litmus paper, the quantity of uncombined lactic acid which came away during this period must have been considerable. This long-continued formation of so much acid, where the digestion was as it were completely at a stand, and in a stomach constantly discharging its contents, cannot be accounted for but on the supposition of its being the product of a morbidly-increased secretion.

"As the acid which I examined possesses very considerable chemical powers, being capable of dissolving the oxides of lead, silver, copper, and mercury, while it dissolves metallic iron and zinc with effervescence, a case of its secretion in such large quantities by the human stomach puts us in possession of a new fact which may probably throw light upon the functions and diseases of that important organ." 323.

Berzelius was enabled to detect lactic acid in all the fluids of the human body—and it is only in animal fluids that it is to be found. It cannot be formed by fermentation or any process independent of vitality, agreeing in this respect with urea, uric acids, and other substances occurring only as products of animal secretion.

Since the sensible qualities of the fluid vomited by this patient, and its effects on the throat, mouth, and teeth, were exactly the same as in other cases where the contents of the stomach turn sour previously to being discharged, our author thought it might be reasonably concluded that this acidity is, in general, owing to the presence of *lactic* acid, and he anxiously sought an opportunity of putting this opinion to the test of experiment.

"Such an opportunity soon presented itself in the case of a young gentleman, who, besides the usual symptoms of feverish cold, complained of sickness of the stomach. He vomited during my first visit, and complained much of the sourness of the fluid, which in taste, he compared to gall. I had some of it brought home, and as it instantly reddened litmus paper, I immediately commenced the process before detailed, and found that the fluid was very strongly impregnated with free lactic acid. As this patient in a few days recovered his usual state of good health, his case abundantly proves, that even a temporary sourness of the stomach may be owing to a morbidly-increased secretion of lactic acid." 324.

Montegre, Dumas, and Philip, have shown that, during chymifaction, the food acquires a degree of acidity, and is capable of reddening litmus paper. Montegre supposes it to be acetic acid, but acknowledges that its sensible qualities are different, and that it is less volatile than the said acid. M. Montegre has also shown that what Spalanzani believed to be a peculiar fluid, endued with considerable solvent powers, termed the gastric juice, is merely a mixture of saliva and mucus—"*acid when digested, but not acid when undigested.*" This acid mixture of saliva and mucus has lately been examined by Chevreul, who found that its acidity was owing to lactic acid. "The sourness of the stomach, so much complained of by dyspeptic patients, may, I have no doubt, be referred to the same origin; and this could not fail to prove of considerable practical importance, by teaching the comparative value of the remedies used in that disease, some of which can merely neutralize the secreted acid, while others exert a salutary influence on the secreting surface." The influence of the nervous system being so powerful, it is obvious why sourness of the stomach and acid vomitings, the products of diseased secretion, are so often the almost immediate consequences of mental emotions. It has long been supposed that iron-filings owe their activity to an acid met with in the stomach or bowels. Physicians rightly concluded that the iron must have been converted into a salt, before it could blacken the fæces or affect the constitution, and it is an old observation that this effect takes place most expeditiously in patients suffering under acidity. Luckily, mercury and silver, the salts which are most poisonous, are not acted on by the lactic acid, unless when in the form of oxides. This may serve to account for the escape of persons who have swallowed silver coins or taken metallic mercury. It may also account for some persons being violently purged and griped by the common blue pill, an accident probably owing to its being too rapidly converted into a salt, by meeting with lactic acid in the alimentary ca-

nal. "In children there is often a predominance of acid, which renders it prudent to combine an absorbent with the mercurial oxide: chalk has been long used for this purpose, and by guarding against the too rapid formation of a mercurial salt, it serves to render this preparation very mild and safe." We shall be anxious to learn the results of Dr. Prout's researches into the nature of the gastric juice, as laid, we believe, before the Royal Society.

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2. *Panic Fever.** The influence of mind on matter is now so well known that Dr. Hamilton needed not to repeat the old story of the Prince of Orange curing the Breda Garrison of scurvy, by a few phials of water, introduced as a specific for that disease. He might have quoted, if not "wise saws," at least more "modern instances," illustrative of the panic which spread its baneful influence over the sensitive minds of the Magdalenes of Edinburgh. The fact, however, which is recorded by Dr. Hamilton, is interesting, and we shall present a short account of it to our readers.

On visiting the Magdalen Asylum, on the 2d of April, 1821, our author found that a girl who had gone, in her usual health, to the washtub in the morning, was now in bed, having been seized with the usual symptoms of fever. There was an epidemic at the time in the town; and contemplating the possibility of *infection*, Dr. H. had the patient sent to the sick room—her clothes immersed in water—and her room ventilated and locked up. Next day, the fever continuing, she was sent to Queensberry-House, and *fumigation* added to the other prophylactic measures. On the 3d day, two other girls were added to the list, and conveyed to the same destination, the precautionary measures, including the fumigating incantation, being again put carefully in force. We quite agree with Dr. Hamilton that, "the *anxious* employment of these precautions probably attracted the attention and awakened the fears of the inmates, who, cut off from intercourse with the world, are peculiarly alive to all that takes place within the walls of the Institution." A decided alarm now spread among the women, heightened by the idea that the fever had crept into the asylum with the clothes that were sent there to be washed. 4th day, three others had sickened early in the morning, and eight more in a few hours afterwards. All these were sent off to the hospital—all apparently very ill, some with cold tremors, others with flushed face and full pulse, some with nausea, head-ache, vomiting, &c. The linen was drowned, the rooms fumigated, and every thing done to destroy the *contagion* of a few women taken suddenly ill, and where there was no time for the generation of a particle of contagion, in whatever way the fever might have been first introduced. Next day (5th day) our author

* "The Influence of Panic in propagating Contagious Diseases." By Robert Hamilton, MD. Surgeon to the Magdalen Asylum of Edinburgh. Ed. Transactions, vol. i. p. 296 *et seq.*

visited those sent to the hospital. "They all appeared decided cases of idiopathic fever." In the evening of the same day, the panic fever had spread to more of the Magdalenes. Thus, in four days, 22 out of a community of 50 individuals, became stricken with fever. "The minds of the most stout-hearted in the house, not excepting the (*medical?*) superintendants, participated in the alarm." Dr. Hamilton, however, emancipated himself from the thraldom of fear—went to the sick-room—and, in decided language, pronounced the whole to be a delusion—"that they were yielding to their fears alone, and getting ill merely because others had done so before them." The tide of opinion now turned, and set briskly in an opposite direction. "Of the eight patients then in the sick-room, several recovered in the course of the same night." Next morning some of them took to their employments, and seven out of the eight were all at their usual occupations in a few days. None of the inmates sickened for three weeks after this period, when some of those that were first sent to hospital having returned and relapsed, two or three fresh cases occurred, when all was well again.

We agree with our author in his conclusions; but we think he must acknowledge that, if to him the merit of checking the panic fever belongs—so also does the charge of first contributing to spread it by the ultra and unnecessary measures put in force to destroy the phantom contagion, existing only in his imagination.

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3. *Physiological Effects of Lightning.** In the second number of the 19th vol. of Schweigger's Journal, we read of a case which may throw some light upon the manner in which this dreadful meteor acts upon the human frame.

Two cars were going along a hollow road, bounded on each side by a forest. In the first were seated two brothers of the name of Teele, the one, ætat 33, the other, 29. In the second, their nephew, ætat 20, and M. Decker. The lightning struck successively the horse of the first car, the brothers, Decker and his companion, the latter of whom did not survive the accident. The horse became stiff upon the spot; the skin of the belly was torn in all its lower part, the mouth open, and the teeth blackened. The flash struck young Teele as it passed his umbrella, which was thrown, with his watch, 24 feet from the chaise: this was pierced by an opening half a foot in diameter. The body, carried to the next village, was put into a lukewarm bath and rubbed; blood ran from the nose, mouth, and ears, but no sign of life reappeared. The mouth and nose were blackened, the skin of the arms and hands, both of which grasped the stick of the umbrella, was furrowed even to the bone; the sleeves of the coat and shirt were torn; but the lesions of the skin were not at all like the blisters and eschars which follow the application of red-hot iron. The

* Gazette de Santé, No. xviii. Juin.

skin seemed to have been raised by a very rough friction; the clothes showed no mark of a singe, but were torn as though by the rapid passage of a sharp pointed instrument. Decker, who was in the same car, received, at the same instant, so violent a blow in the lower part of the abdomen, that he was hurled out, and remained senseless for half an hour. When undressed, a deep redness, without any open wound, was found in the place where he felt the stroke. He was able to resume his route immediately.

The two brothers were much injured by the lightning, but however, they soon recovered themselves. We may follow the track of the electric spark, and observe the nature of the wounds caused by it. As they were sitting beside one another when struck, the spark first touched the head of the eldest, tore into several pieces the velvet cap which he wore, grazed the temporal bone an inch above the left ear, then went behind it; slightly scorching the skin it descended upon the neck, traversed the nape obliquely, and mounted again towards the right ear: there it scratched the interior of the ear near the tragus and the antihelix, then fell upon the right shoulder, passed under the chin, over the right breast, upon the arm, and, returning over the back, descended the length of the vertebral column to the sacrum.

In this last part of the course of the lightning the skin was not cut, but only a little raised and very red. Marks of the same kind were seen across the arms, which, with the tearing of the clothes showed the zig-zag direction of the spark, passing alternately from the right side of the younger brother to the left of the elder. It had fixed upon the former, where it met with some pieces of metal which were in his waistcoat pocket; there it had raised the skin for a space the size of the hand; then descending the left side of the region of the pubis, it had traversed the interior surface of the thigh, the ham, and calf of the leg. A steel chain which the younger brother carried in his fob had conducted the spark to the groin, where the part, the size of the chain, had been stripped of skin and marked with a deep wound. The breadth of the marks was in general about two inches. The wounds were most extensive and deepest at the intersections of this track; many were very painful and suppurated abundantly. The skin had been rolled into dense folds on the right and left by the rapid passage of the electric fluid, the wounds were not bloody, nothing indicated a lesion of organs by fire or heat, but the effect might be compared to the grazing of a ball on the surface of a limb.

The brothers having recovered their senses, experienced violent nausea, and vomited after a few cups of tea; at first some blood came away; notwithstanding the extent of the injury they had no fever. The eldest was quite deaf on the day of the accident, the next day hearing was somewhat recovered, there remained some paralysis in the stricken limbs: the wounds cicatrized.

A year after, (the accident happened in May, 1821) the elder brother was still a little deaf, with a disposition to drowsiness. The younger had had an inflammatory fever and was subject to a periodical weakness before unknown. Their nervous system had suffered much.

4. *Spanial Marrow and Nerves.* Professor Bellingeri has recently published some anatomico-physiological remarks on the medulla spinalis and its nerves, containing many facts, and some curious speculations. He has endeavoured to ascertain the relative distribution of the grey and white substances in the spinal marrow, by hardening the chord in nitric acid much diluted with water. The professor comes to the conclusion, that the spinal chord is composed of two substances—grey and white—the grey in the centre, the white on the surface—that its structure is fibrous—that the quantum of white substance in the whole spinal marrow, is much greater than of grey; except in the sacral region, where the proportions are either equal or in favour of the grey. The form of the latter resembles the figure of an X. The anterior horns of the grey matter no where reach so far as the periphery of the chord. Considerable difference in the distribution of these two substances in man, as compared with other animals, is observable; and this phenomenon is made use of by our author in explanation of certain functions which shall be immediately alluded to. From the arrangement of the grey and white matter in man and in animals, Bellingeri concludes that the spinal marrow is divided into six fasciculi, of which, two are anterior, two lateral, and two posterior. The anterior fasciculi are nearly, but not entirely, divided from each other—in the same way they are separated from the lateral;—but the posterior are entirely detached from each other and from the lateral. This arrangement holds good both in man and in animals. But the proportions vary considerably.—Thus, the posterior fasciculi in man, (excepting in the lumbar and sacral regions) are thicker than the anterior; whereas in the ox, kid, and birds, the anterior fasciculi are rather thicker than the posterior, except in the superior cervical region in the ox, and in the inferior lumbar and sacral regions in the ox, kid, and birds. Our author agrees with Soemmering that the spinal chord is chifly composed of prolongations from the cerebellum—or, at all events, communicates chiefly with it. It is demonstrated, he avers, that the anterior roots of the spinal nerves have a triple origin—first, from the anterior fasciculi—secondly, from the region of the anterior lateral fissures—and lastly, from the lateral fasciculi. There are, however, some fibres which rise directly from the white substance of the anterior and lateral fasciculi—and some that appear to come from various parts, superficial and deep-seated, of the spinal chord generally. The anterior roots are composed of numerous nervous fibres, having nearly the same thickness (that of a hair) each of which arises separately—approaches the neighbouring fibres of the same root, but does not blend with them. The anterior roots, in man at least, do not enter the spinal ganglia. The posterior roots are composed of fibres arising in a triple order, the chief part coming directly from the posterior horns of the grey substance, while other filaments, few in number, take their origin from the white substance of the posterior fasciculi—and others again from the lateral fasciculi.

In comparing the anterior and posterior roots, four circumstances may be remarked, in which they differ. 1st. The filaments of

the posterior roots, generally speaking, thicker and less numerous than the filaments of the anterior roots—2dly. The filaments of the posterior alone present the plexiform structure. 3dly. The posterior roots alone form the spinal ganglia. 4th. The neighbouring posterior roots almost all communicate by nervous filaments.

In regard to the functions of the parts, M. Bellingeri considers those filaments which come from the anterior fasciculi as serving the purpose of voluntary motion, because they arise from prolongations of the cerebrum;—and he holds that anatomy, physiology, and pathology combine to prove that the brain proper presides over voluntary motion—thus differing in opinion from his colleague Rolando, from Fleurens, and from other recent experimenters. The grounds assigned for his dissent are as follows:—The third pair, or motores oculorum, which are nerves of motion only, rise chiefly from the crura cerebri—and to the sixth, or abductores, nerves purely of motion, arise from the superior extremity of the corpora pyramidalia, productions of the cerebrum. The principal fibres of the twelfth nerve, or hypoglossus, presiding over the motions of the tongue, arise from the external sides of the corpora pyramidalia.—He thinks that pathology confirms these anatomico-physiological views of the brain proper being the regulator of voluntary motion. Paralysis, he observes, occurring on the side opposite to the injury received, proves the cerebrum to be the seat of motion; because if hemiplegia occurred from injury of the cerebellum, it could not be on the opposite side, from the absence of any decussations of the prolongations.

In respect to the uses of the posterior roots of the spinal nerves, M. Bellingeri comes to the conclusion, that those filaments coming from the posterior fasciculi are destined for voluntary motion—while those coming from the lateral fasciculi, are supposed to answer the same purposes as the corresponding filaments of the anterior roots—viz. the regulation of the organic functions. The filaments arising from the posterior cornua of the grey matter are supposed to communicate the sense of touch. The posterior roots alone present a pluxuose structure in their origin and course. They constitute the spinal ganglia, and are composed of thicker filaments than the anterior roots. The olfactory nerves, the optic and the auditory, arise from grey matter, or communicate with it at their origin, and have a ganglioniform structure. On the other hand, the nerves of voluntary motion arise from the white medullary matter—have no pluxuose or ganglioniform structure—and are thinner and finer than the sentient nerves. It is hardly necessary for us to observe, that the physiological portion of M. Bellingeri's remarks are little better than speculations, and very far from being confirmed by unequivocal facts. But the most extravagant of these speculations are yet to come. He declares his belief, that the nerves coming from the cerebrum and its productions, serve for the purpose of flexion and abduction, which those from the cerebellum and its productions, serve for extension and adduction. We conceive that this is downright raving. Is the *action* of a muscle that extends a limb different in kind from that which bends it. Certainly not. M. Bellingeri might just

as well conclude, that the cerebrum was for the fingers, and cere bellum for the toes, as that one was destined for muscles that extend, and the other for muscles that bend the body or any of its members.

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5. *Effect of Ptyalism.** By a process of reasoning into which our limits will not permit us to enter, Mr. Arnott has been led to conclude, that the well-known effect of mercury in arresting acute diseases, as hepatitis and dysentery, is owing principally, if not solely, to the counter-irritation produced in the mouth by complete ptyalism. He considers that doctrine erroneous, or at all events, overstrained, which attributes the cure of acute diseases to the general action of mercury on the whole vascular and secretory systems, and the consequent depletion which ensues. Neither does he count for any thing the specific action, supposed by many to be set up in the system, and to supersede other morbid actions going on previously. The *facts* on which the present doctrine of counter-irritation turns are as follow :—On a voyage from India, many of the ship's crew were affected with dysentery. "After trying most of the other remedies that prove serviceable in such cases," says Mr. A. "recourse was obliged to be had to complete mercurial ptyalism before the disease would yield, and in several instances no other practice was followed. In the last five cases that occurred, I tried the effect of powerfully irritating the mouth with powdered capsicum diffused in water, for which its recently prepared tincture was afterwards substituted, as possessing greater strength." The patients put a tea-spoonful of the medicine into the mouth, every five or ten minutes, as the irritation ceased, and retained it until the mouth became filled with saliva. This process was continued with little intermission during the day, or as long as was requisite to afford relief. Great heat and smarting were produced in the mouth, with vesication, at different points of its lining membrane, and the saliva was copiously secreted. The effects were these. "The colicky pains were soon relieved. The dejections soon decreased in frequency ; and in one instance, after the employment of the irritant for about twelve hours, there occurred the sudden change in the bowels from irritability to such a torpid state, that, for two days together, there was but one scanty evacuation." In another instance the patient, who applied in the morning for relief from an irritation that appeared to exist both in the mucous membrane of the respiratory and digestive organs, recovered so completely in about twelve hours' application of the capsicum, as to be able to resume his occupation on board, free of complaint, on the third day. "In one case the patient had already taken a large dose of calomel, in about six hours after commencing the use of the irritating tincture, and twelve hours after the exhibition of the calomel, his breath had the mercurial fetor, and he was soon affected with severe mercurial ptyalism.—This was the more remarkable, as when the same man complained

* Mr. Arnott's Enquiry, &c. See Bibliography.

of dysentery in a former part of the voyage, it was with difficulty that ptyalism could be produced.

The above are the main facts which are adduced by our author, in support of his theory of local irritation superseding or arresting a general disease. "The above trials," Mr. A. adds, "are, at least, sufficient to show that powerful irritation of the mouth is adequate to the removal of an inflammatory disturbance of the intestines, and consequently, that the same measure should be of advantage in other analogous diseases."

We are unwilling, by any observation of ours, to weaken the facts brought forward by Mr. Arnott. But we cannot help thinking, that he attaches more importance to the ptyalism—that is, the irritation of the mouth—than it deserves. From what we have seen in others and felt in ourselves, we should be inclined to consider the mere affection of the salivary glands, as acting a subordinate part in the removal of a severe affection, as of dysentery, for instance. What induces us to dissent from Mr. Arnott, is the repeated observation of dysentery and other diseases abating *before* there was any considerable pain or irritation of the mouth. Every one who has suffered ptyalism, must recollect that the first swelling of the gums and rush of saliva to the mouth are productive of very little inconvenience; though it is at this precise period and sometimes before, that the dysenteric symptoms abate. It is after the ptyalism is a day or two established, and especially when ulceration takes place in the gums, cheeks, and tongue, that the penance begins to be felt. We repeat it, that the first day or two of ptyalism is accompanied by very little irritation, comparatively, and consequently that we do not think the subsidence of the dysenteric affection is owing to counter-irritation in the mouth.

II.

PATHOLOGY.

Actio læsa suum designat singula morbum;
Preterea morbum partis mutatio signat.

1. *Melanosis.** In October 1822 our authors had an opportunity of examining a fine specimen of this very curious disease in the horse. The animal was emaciated, and seemed to have been long under the influence of the disorder. During life they saw a number of tumours, hard but moveable, under the root of the tail and in the neighbourhood of the rectum. Under the delicate mucous membrane of the verge of the anus, they were seen of a deep black colour. On the left buttock an enormous mass of the same was felt immediately under the skin, but connected with deeper parts. In the centre of this mass was an ulcerated opening, from which a fetid pus issued, mixed with small pieces of the melanosis. On dis-

* Messrs. Cullen and Carswell. Ed. Transactions, vol. i. p. 264.

section, great masses of this substance were found in other places besides the cellular texture.

"There were many seated at the root of the neck, on the right side, corresponding to the subclavian region in man, partly in the cellular substance lying between the muscles, and partly in the very substance of these latter. There were a few near the base of the scapula, under the panniculus carnosus. Some were found in the groin, on the same side, in the seat of the superficial absorbent glands. We noticed one large mass, of the shape and size of an orange, between the sixth and seventh ribs of the right side, which had orginated in the substance of the intercostal muscles, and had increased inwardly, so as to raise the pleura from the subjacent bone and muscular strata. The peritonæum had melanose matter lying upon it in streaks at that part where, leaving the bladder and rectum, it gives a covering to the last lumbar vertebra. The pleura in several places was similarly affected, and chiefly where it forms the mediastinum, and gives a covering to the pericardium. From near the termination of the aorta, down the lumbar region of the left side, into the pelvis by the side of the rectum, and out of it by the exterior aperture, there extended an immense chain, beginning above by one or two small insulated tumours, situated on the aorta, gradually increasing in bulk, till, at last, the black matter formed near the anus, masses as large as a child's head.—From the anal region, the disease appeared to have spread into the muscles of the buttock. Such were the situations in which this curious disease was found, the substance of all the viscera being quite healthy." 266.

After a careful examination, our authors became satisfied that the large masses of melanosis were a congeries of smaller ones of different sizes. Each was surrounded by a cyst of condensed cellular membrane. These cysts did not communicate, but merely adhered together, thus forming large masses. Some of the individual cysts were no larger than peas, others as an apple, and of all intermediate magnitudes. The investing cysts of the melanosis, situated in other structures than the cellular membrane, as in the muscular structure, were remarkably thin, so as, in some places, to be hardly detected. The tumours when cut into, were all of a deep black colour, like the pigmentum nigrum, or China ink.—Most of them were as hard as cheese, while others were much softer. The vessels in their vicinity were not enlarged. Nerves were seen, sometimes running over the surface, sometimes traversing the very substance of the black masses, but without any cognisable change in the nerves themselves. The surrounding muscular texture was unchanged, and seemed merely separated in its fibres for the lodgment of the melanose matter.

"On the pleura and peritonæum, the disposition of the melanosis was somewhat different. It was effused on the surface of these membranes, not in round masses, but in streaks and patches. There seemed to have taken place on their surface a formation of cellular tissue, into which the black matter appeared to have been poured out, for it could be scraped off, and the serous coat was still left

smooth and entire. The matter, too, was much softer, so as to be semifluid: the membranes upon which it was formed bore no traces of vascularity." 268.

This case they have thought proper to lay before the Society, because they think it well calculated to convey a general idea of Melanosis, even in the human subject. The striking appearances, as above recorded, are often met with in horses, constituting a peculiar disease to which the French Veterinary Surgeons have given the name of charbon, or maladie charbonneuse.

In the human subject, we occasionally find the disease equally well marked in its characters, and equally independent of other alterations of structure. Breschet has described cases of this kind: but the best specimen of melanosis, in the opinion of our authors, occurred lately in the clinical practice of Dr. Home, of which they are permitted to give an account.

Case: John Houston, aged 51, a shoemaker, complained on the 18th of March, of pretty severe symptoms of pleurisy, for which he was bled, blistered, and purged, with considerable relief. Up to the 23d, the symptoms diminished daily, the cough continuing, which, however, also gave way to purgatives, and pectoral medicines. On the 28th, an hæmorrhoidal affection supervened, and yielded to leeches. On the 1st April, he complained only of debility, for which a generous diet was ordered; but he died that night.

Here was a man submitted to the daily inspection of a discerning and experienced physician, as well as to the eyes of several intelligent pupils, without exhibiting "*any peculiar symptom that could have led to the suspicion of a deep-seated internal disorganization.*"

"On examination of the body thirty hours after death, the first incision exposed a number of black globular bodies, lying in the cellular tissue between the pectoral muscle, and third and fourth ribs of the left side, about the size of peas, and some of them adhering to the periosteum. The substance of the rib itself was completely black, as was also the sternal third of the clavicle of the same side; but these bones were in no other way altered from their natural state. Upon opening the chest, the pleura was found studded with similar tumours, here and there insulated, but in general aggregated, so as to resemble clusters of purple grapes.—The last mentioned phenomenon was particularly remarkable on the right lung, along the bodies of the vertebræ on both sides, and upon the upper surface of the diaphragm on the left. Many of the tumours were hardly raised above the pleura, but others had long slender necks, so that they were like polypi. In colour most of them were jet black, others of a deep purple, or even reddish hue, while a third sort seemed to contain portions of a peculiar white colour, blended with black *The lungs were extensively beset with these tumours; and several of an exceedingly small size were detected under the mucous membrane of the bronchiæ.* The pericardium, and the very substance of the heart were studded with melanose bodies. *As the cause of the symptoms under which the patient laboured during life, upwards of three pounds of fluid were found in*

the cavities of the pleura, and there was a thin pellicle of albuminous matter covering the surface of the lungs. In the abdomen, the liver, spleen, kidneys, omentum, and peritoneum in different places, were affected in the same manner ; but the tumours in the liver contained a considerable portion of white cerebriform matter. To shorten the description, perhaps already too long, we may state in general, that similar tumours were found connected with the internal table of the skull, where they had formed for themselves little excavations ; in the subcutaneous cellular substance of the thorax and abdomen, so as to be discernible through the integuments ; and, lastly, among the fibres of the intercostal muscles.—Doubtless, had the examination been pushed further, we might have found the disease in other organs, but from peculiar circumstances, it was impossible for us to render the dissection complete." 274.

When the reader pursues this dissection, and compares it with the passage just preceding, where our authors aver, that there were no symptoms to indicate hydrothorax and extensive disorganization of the lungs, he will be a little surprised. The stethoscope or percussion would have detected these lesions with the greatest ease, and therefore it is manifest that neither of these diagnostic measures were tried—a most culpable piece of neglect, which we have no reluctance in holding up to general reprobation. The physician who is placed in a public situation, as in an Hospital or Infirmary, betrays his trust and neglects his duty, when he obstinately refuses to put in action the improvements which take place from time to time in the science he professes. We hope these remarks will have a proper effect on those whom they concern.

The tumours found in the different parts of the body possessed certain general features. They consisted of a cyst separated by a loose cellular tissue from the surrounding textures, and containing the peculiar black matter of the disease in question, varying much in the degree of consistence, from quite solid to nearly fluid. In the liver only there was a remarkable variety noticed. The tumours here were as large as chesnuts, some of them white, consisting of cerebriform matter—others pure melanose—and others still containing a mixture of both.

Another excellent specimen of melanosis presented itself in the practice of professor Alison. The patient was a female, aged 42 years, admitted into the Royal Infirmary on the 3d of June, complaining of severe pains shooting down from the loins to the inferior extremities, and round the abdomen. She had similar pains in the right shoulder and arms, increased at night, and by motion. She had become weak and emaciated since her complaints began, and was liable to shivering, followed by flushing and perspiration. The abdomen was swelled, but did not fluctuate on percussion, the distention varying in degree at different times of the day. She had thirst, with scanty, high-coloured urine, and a hard moveable tumour could be felt in the iliac and hypogastric regions. She was also liable to paroxysms of dyspnœa during the night. She stated her complaint to be of five or six weeks standing, and to have commenced after exposure to cold, with pains in the joints.

Treatment. Leeches, fomentations, anodynes and diaphoretics.—Tympanites occurred on the 7th June, for which calomel and opium were employed, and continued till the 9th, when soreness of the mouth was evident. The pains of back and lower extremities increased, with distention of the abdomen, all aggravated by globus hystericus. On the 21st, several small painful tumours were observed on the integuments of the abdomen. Examined by a skilful accoucheur the internal tumour was pronounced to be unconnected with the uterus. On the 1st July, great debility, with hectic fever, and tendency to sloughing of the sacrum. On the evening of the 7th, after vomiting a dark-coloured matter, she soon died.

Dissection. There were several dark-coloured tumours dispersed over the body, especially in the mammæ. They were encysted in the cellular substance, and contained melanose matter of soft and pulpy consistence. Within the abdomen most of the cellular and adipose textures had disappeared. The peritoneum lining the parietes was of a blackish colour, and the black matter was irregularly deposited in striæ and spots upon the inner side of the membrane, which had lost much of its transparency. The omentum presented a similar appearance. Between the folds of the mesentery, and beneath the serous membrane of the intestines there were numerous black spots and small tumours. The external surface of the ovaria had a dark, shining, lobulated appearance, with black matter irregularly deposited in spots, giving a mottled appearance to the whole. When cut into, their substance was uniformly black. This melanose matter was found in various other portions of cellular texture throughout the thorax and head. Even the bones of the sternum and some parts of the skull were black. The kidneys, liver, spleen, and mucous membrane were free from the disease.

Our authors here make several observations on the distinction between the disease under consideration and cancer and fungus hæmatodes. We think it is abundantly evident that there is a striking difference between melanosis and these last-mentioned diseases. Scirrhus, for instance, chiefly attacks glandular structures that have been previously in a state of inflammation—while hæmato-fungoid tumour attacks every kind of texture. They both begin in a definite point—gradually extend their ravages in every direction—convert all the proximate tissues, by a kind of assimilative process, into their own kind of matter—and finally prove fatal, by sloughing, hæmorrhage, or irritative fever. In their course, they are generally attended with lancinating pains, which is seldom the case in melanosis. The matter of the latter was constantly found in cysts, which our authors consider as one of its distinctive characters.—Neither in melanosis had the neighbouring textures of the body undergone any alteration in consequence of the ravages of the disease. The bones were coloured, but not diseased. The parenchymatous viscera were not altered in texture. The substance adjacent to the cyst was as healthy as the rest of the organ. There were no traces of vascularity. These and other considerations induce our authors to believe that melanosis, in its

simple form, is of a nature quit distinct from cancer, both in its seat, symptoms, progress, and anatomical characters. With this negative kind of knowledge we must be satisfied, at present, till the disease shall have excited more generally, and for a longer time, the attention of the medical world.

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2. *Large Biliary Calculus.** Dr. Craigie has recently narrated the case of an old lady, who voided a large biliary culculus preceded by symptoms of ileus, and has come to such extraordinary, and, as we think, such erroneous pathological conclusions, that we shall give the particulars of the case, and our reasons for differing, *toto cælo*, from the respectable author.

On Sunday, 28th March, an elderly lady, after walking from Leith to Edinburgh, became sick,—vomited,—and felt considerable diffused pain in the belly. These symptoms got more severe on Monday (29th) and also on Tuesday. The bowels had not been open since Saturday the 27th, although repeated purgatives had been administered and vomited up again. Blood was taken from the arm on the 30th, (Tuesday), and on Wednesday, 31st, Dr. Craigie first saw the patient. She had now frequent painful retchings and occasional hiccup—"vomiting at intervals of a *yellow coloured fluid*, of the *bitter* taste of which she complained much." The tongue was dry and brown—there was much thirst—skin parched and imperspirable—face and extremities inclining to be cold—pulse 86 and small—whole surface of the belly extremely tender and painful, with some tension—complaining most of pain in the line of the transverse arch of the colon. Dr. C. directed 15 or 20 ounces of blood to be taken, a purgative injection to be thrown up, and the patient to be put into a warm bath. A purgative and anodyne pill was also administered by the mouth. In the evening she was again bled, and 40 drops of laudanum ordered on removal from the bath. *Thursday, April 1st.* Had a few hours sleep and ease in the night; but at six in the morning the pain returned with great violence, "the sickness and vomiting of *bilious matter* almost incessant." No passage through the bowels. Eighteen leeches to the abdomen—turpentine and assafœtida injection—fomentations. The injection returned without a particle of feculent matter. An opiate at bed-time. *Friday, 2d. April.* Abdominal pain is not relieved—vomiting recurs at intervals—bilious matter ejected is darker, and "seems accompanied by minute portions of fæcal matter"—bowels obstinately bound.

A tobacco enema exhibited, and remained in the bowels from 12 till four o'clock. A senna enema was then thrown up and brought off some of the turpentine injection. Another tobacco glyster was thrown up, and Dr. Craigie left the patient in such a wretched state that he expected to hear of her death every moment. *Saturday, 3d April.* (stated by Dr. C. to be the 11th) there was a sensible improvement. The vomiting had not return-

* Dr. David Craigie. Ed. Journal, October 1824.

ed since the use of the bath the night before—she had slept a good deal. The tobacco injection was repeated, as the bowels had not now been opened for a week. *Sunday, 4th April.* Still easier —very slight traces of feculence in one of the injections. An injection of tobacco being this day thrown up, the patient soon began to experience a sensation of intestinal motion, and desire for the bed pan—on which "she voided, with a feeling of acute pain, some hardened excrement—uttered a loud shriek, and instantly fell from the nurse's arms, without giving the slightest sign of consciousness." On recovering from this, the motion was examined, and a globular biliary concretion was found, weighing 160 grains, and being *one inch and two lines* in diameter. It is hardly necessary to say that the woman passed considerable quantities of fæces after the expulsion of the gall stone, and soon recovered.

Now what does our author conclude from this case?—He concludes that this gall-stone passed through the cystic duct and ductus communis, during this week of illness, and produced all the symptoms of ileus—there being no obstruction in the intestinal canal all the time! Be it remembered that this patient presented not the slightest trace of jaundice while the duct was plugged up with this concretion—nor did she fail to vomit up bilious matters almost all the time of her illness. This, Dr. Craigie thinks, is rather wonderful—and truly so it would be, if the concretion had been passing along the ducts. Dr. C. thinks that, from the moment it got into the intestinal canal there could be no obstruction to its discharge from that tube. But we beg to inform him that, to our knowledge, a physician in this metropolis lost a patient within these few years, in consequence of a biliary concretion, not larger than a pigeon's egg, becoming jammed in the ileum and causing complete ileus, terminating in death. Is it not evident to every reflecting mind that this immense concretion passed through an ulcerated passage from the gall-bladder into the duodenum or other small intestine, and there produced vomiting, constipation, and all the other symptoms till finally expelled from the rectum? How else should the bowels be obstinately confined all the time—how could she continue to vomit up bile every day, if the ducts had been plugged up—how could she have been free from jaundice? Among the cases quoted by our author, the one published by Mr. Brayne in the 12th volume of the Medico Chirurgical Transactions (and in our journal for March, 1824, Number 16) might have opened his eyes—for it was precisely in point. A woman, after much suffering, passed a large biliary concretion *per anum*, and recovered; but dying afterwards of another disease, she was examined, and an adhesion was found between the gall-bladder and duodenum the breadth of a shilling, with an aperture in its centre. What can be more clear than that it was by such a passage, and not by the biliary ducts, that the concretion made its way in Dr. Craigie's case. He saved his patient's life, in all probability, by the tobacco enemata, by which the irritated and spasmed intestines were relaxed, so as to permit the concretion to pass along. We think, on mature reflection, Dr. Craigie will admit that his patho-

logical conclusions have been too hastily drawn—and that he has viewed the case in a wrong light. At all events, we appeal to the public as the ultimate judge.

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3. *Occult Disease of the Chest.** There is no other organ in the body, we think, which will appear to carry on its function so regularly as the lungs, when in a state of extensive structural disease. It would seem almost that a man may breathe tolerably well, under ordinary circumstances, with a few cubic inches of sound lung.

Dr. Carter admitted a man, 50 years of age, into the Kent Hospital, labouring under excessive debility, with a dry furred tongue, frequent feeble pulse, tremor, and complaining of great pain in the right thigh and knee, which were swelled. He made no complaint of any thoracic affection till the day of his death, about a week afterwards; nor did there appear any symptom of disease in that quarter. On dissection the pleura pulmonalis and costalis were found adherent on both sides. The right lung was diseased throughout, being studded with tubercles—some suppurated, some crude. There was also calcareous matter in cysts. "There was universal inflammation of the lungs and of the pleura lining the ribs on the right side." There was also caries of the bodies of two of the dorsal vertebræ. The cavity of the chest contained a considerable quantity of fluid. The abdominal viscera were sound.

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4. *Inflammation of Veins.*† On the evening of the 19th of March, 1823, Dr. Duncan was summoned to Mr. A. a medical gentleman, 88 years of age, whom he found in bed, with his left hand swollen, red, and painful, as if affected with *erysipelas phlegmonodes.* There was a sore on the knuckle of the fore-finger, resembling the remains of a blister or small boil. There was also some swelling, though inconsiderable, of the wrist and fore-arm. His countenance appeared livid, his respiration was frequent and interrupted, pulse 120 and full, tongue furred, thirsty. He could give no information respecting the sore on the knuckle. He appeared distressed and agitated, but not alarmed. Dr. D. was aware that the patient had recently been much harassed; and he ascribed great part of his present illness to moral causes. Dr. D. afterwards learnt that Mr. A. had dined out on the preceding Saturday, in good health, but on Sunday evening complained of being cold. On Monday his landlady observed a boil on his knuckle, which he opened with a lancet that had been employed a few weeks previously in opening a carbuncle. During the winter he had studied hard, sitting up late and rising early. Poultices, and an aperient. 20th. Apparently much better—pulse down to 80, and without febrile irritation—

* Dr. Carter. Med. Repos. October, 1824.

† Dr. Duncan, Jun. Med. Chir. Trans. of Edinburgh, vol. i. p. 439, *et seq.*

affection of the hand subsiding. In the evening, however, there was a great exacerbation—pulse 120, not full—swelling extending slowly up the arm, though without pain. 21st. No remission, as expected, this morning. Had passed a restless night, and taken some laudanum. The swelling was still making progress up the arm, but unattended with redness or pain.—*Evening*. Dr. D. received a hurried message. The patient had sent for Dr. Kenney and Dr. R. Hamilton, the latter to bleed him, as he had some hæmoptysis during the day. He was now looking extremely ill—the sore appeared irritated—the hand and fore-arm much swelled, and one or two red streaks running up from the elbow to the shoulder, in the course of the cephalic vein. His respiration was now again much affected, but he denied having any pain in the chest. He had frequent cough, but little expectoration, the sputum being tinged with blood. Pulse 110, not strong—thirst—foul tongue. Sixteen or eighteen ounces of blood were taken from the arm, and proved buffy, and cupped. The pulse fell to 96 but no other salutary change was perceptible. He took some light supper with a relish. In the night Dr. H. was again sent for, on account of wandering pains in the stomach, from flatulence. 22nd. All the symptoms aggravated—pulse 120—swelling extending up the arm —no swelling of the axillary glands. Twelve leeches to the arm and then an enema thrown up. *Evening*. Decidedly worse—pulse 120—subsultus tendinum—transient delirium—made no complaint of pain—expressed no apprehension of the result. A full dose of laudanum. The early part of the night was restless and agitated. At two in the morning of the 23d a heavy wandering, and a sinking state took place. At four in the morning Dr. H. found him apparently dying, the blood still oozing from the leech-bites—pulse 140, and very feeble. Heat, stimulants, &c. were tried in vain. The breathing became sonorous and depressed, and death soon closed the scene.

Dissection. The skin and muscles of the chest were healthy—general adhesion of the lungs to the costal pleura, pericardium, and diaphragm, by recent exudations of coagulated lymph. There were several spots of condensed livid lung, one of them larger than the rest, seemed as if affected by gangrene, but had no bad smell. In the left side of the chest there were five or six ounces of brown-coloured fluid. The lungs did not collapse when freed from their adhesions, but remained full and tumid. Yet the lungs were crepitous, though considerably gorged with serum, especially the right. Several tubercles were found, and some calculous depositions. The other viscera sound.

"Many livid spots were observed externally on the left arm; and on the back of the hand on the same side, between the heads of the metacarpal bones of the first and second fingers there was an ulcer, around which there was an evident swelling of the cellular substance, extending more or less up the wole arm. On making a long incision from this ulcer to the top of the shoulder, a small abscess seemed to be laid open at the bend of the arm, but it proved to be the cephalic vein which had been divided, and was full of purulent matter. The vein was now traced with

more care, which, from its increased size and solidity, was easily done, and we found that the veins coming from the back of the fore-finger, middle and ring fingers, were all diseased; but that from the little finger was healthy. The morbid state of the vein extended upwards along the whole course of the cephalic to its termination in the left subclavian, which remained perfectly healthy. The disease of the vein consisted in external redness, arising from the increased size of the *vasa vasorum;* thickening of all its coats, so that it remained like an artery, round without collapsing; increased size, especially in the fore arm; its containing no blood in any part of its course, and being generally filled with purulent matter, except in a few places, where it seemed empty; and in the inner coat being every where red and thickened. On the back of the hand, it appeared as if matter had been formed in the cellular texture itself; but upon more minute examination, it was quite evident that it existed solely within the veins. Throughout, the cellular and muscular texture of the arm were almost healthy and natural, even in the immediate vicinity of the diseased parts of the vein; but towards the end of the dissection, a considerable quantity of serous fluid was observed to have escaped from the divided tissues." 448.

We think Dr. Duncan is entitled to consider the above as a case of "death solely from inflammation of the veins," although there were peculiarities in the case which are not to be entirely overlooked. There was evidently considerable disorder of the lungs; both recent and of long standing—and it is improbable that the patient could have survived many years, from the progress of the tubercles. Whether this condition of the respiratory organ had any effect in producing or accelerating the fatal event, it is difficult to say. Dr. Duncan was struck, even at his first visit, with the livor of the patient's countenance, and the disordered state of his breathing. Still the immediate cause of death cannot be fairly attributed to the pulmonic affection, on the other hand, it is probable, as Dr. Duncan observes, that if the recent pulmonic affection existed previously to the fever produced by the venous inflammation, it would be aggravated, as all local complaints are, when a general excitement of the system supervenes. As to the sudden termination of the disease, experience has shown but too certainly that inflammation of a vein, when considerable, often destroys life in eight or ten days. The nature of the local affection was evi dently different from erysipelas of the cellular texture. There was an absence of pain on pressure, except along the course of the vein—there was no great inability of moving the limb—and, lastly, the local symptoms were comparatively slight. All of these, our author thinks, tend to distinguish the disease from erysipelas. Still there was increased action in the cellular tissue of the whole limb, with a corresponding effusion, not of pus or coagulable lymph, but merely serum. The consequent fulness and extension of the limb assisted in preventing the medical attendants detecting the real nature of the disease. During the life of the patient, and indeed previous to incision, there was little appearance, Dr. D. observes of the vein being the chief seat of the disease if

we except the red streaks running up the arm, and the tenderness over the immediate track of the vessel. There was no longitudinal ridge or cord-like substance distinguishable.

In respect to the actual exciting cause of the venous inflammation, there can be little doubt that it was connected with the phlegmon on the knuckle—which phlegmon was, in all probability, produced by some virus on the lancet by which it was opened. Dr. Duncan thinks, however, that this effect would not have been produced under common circumstances. He considers it probable that, in opening the boil, the gentleman had unfortunately penetrated a vein situated beneath it;—"and perhaps it is as probable that he had inoculated himself with matter from his own body (from the boil) as that the lancet, which he had wiped apparently clean, should have remained so long contaminated."

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5. *Dissection of Lord Byron.* A foreign journal (*Gazette de Santé*, 25 August, 1824) gives the following minutes of the *post mortem* examination of our illustrious countryman and poet—Lord Byron. From this dissection, it is manifest that his Lordship lost his life, in all human probability, by his inveterate prejudice against blood-letting.

1*mo.* The bones of the cranium were extremely hard, and without any trace of suture or diploe, resembling, in that respect, the skull of an octogenarian.

2*ndo.* The dura mater was so firmly attached to the internal surface of the cranium as to be separated by great force only. The vessels of this tissue were much injected. It was adherent, in several places, to the pia mater.

3*tio.* The vessels of the medulla oblongata were finely injected with blood, and the part itself red and swelled. There were about two ounces of sero-sanguineous fluid in the different ventricles.

4*to.* The medullary substance of the brain greatly exceeded its usual relative proportion to the cortical, and was of very firm consistence. *The cerebum and cerebellum weighed six medicinal pounds!*

5*to.* The lungs were sound, but of a gigantic size—"d'une grandeur presque gigantique."

6*to.* About an ounce of serum in the cavity of the pericardium. The heart was larger than ordinary, and its muscular substance relaxed.

7*mo.* The liver was smaller than usual, as were also the biliary ducts and gall-bladder.

8*vo.* The kidneys were large and sound.

From this report the editor of the Journal abovementioned concludes, that "a small bleeding at the beginning, or a very copious one at the height of the disease, would have saved his Lordship's life—but he obstinately refused to consent to the operation." This may be true; but we do not clearly see the foundation of the editor's next conclusion, namely, that Lord Byron could only have lived a few years more at any rate—"à cause de son excessive susceptibilité qui le rendait ma-

lade aisément, soit à cause de la violence de ses passions, de son travail excessif, soit à cause de sa negligence à employer des remèdes contre son extrême constipation." But M. Miguel ought to know that the passions (excepting *avarice*, to which his Lordship was not prone) subside with advancing age—that the labours of the intellect slacken with the passions—and that we very frequently see more attention paid to *health* and the preservation of *life*, as the one becomes enfeebled and the other draws towards a conclusion. We can perceive nothing therefore in Lord Byron's physical organization, to preclude the prospect of long life, in the absence of those accidents to which the best constitutions are liable.

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6. *Memoir on the Inflammation of Nerves.* By L. Martinet, M. D. [Revue Medicale, June 1824.]

Considerable diversity of opinion obtains among pathologists and practitioners respecting the nature of neuralgic affections—some attributing the pain to an inflammation, more or less acute, of the neurilema of the nerve, while others consider it as a morbid state of the sensibility of the nerve, and independent of any inflammatory condition. Hitherto facts have been wanting in number to clear up this point. M. Martinet has directed much of his attention to this subject for ten years past, and the result is, that in comparatively few instances, is there actual inflammation or other organic change in painful affections of these parts. The neuralgiæ, on the other hand, depending on pathologic modifications of the sensibility in the nervous pulp, are very common. It is to the former or more rare class that the present paper is dedicated—namely, to diseases of the nerves depending on changes in structure, as tumours, erosions, inflammations, &c.—but particularly to inflammation, as the title of the paper expresses.

The seat of this neuro-phlegmasia our author has always found to be in the neurilema—nor does he know of any well authenticated case of inflammation in the nervous pulp itself. The cases which he relates, will, he thinks, establish a distinction in symptoms between the pure neuralgiæ and the inflammation of nerves. To these cases we shall now proceed.

Case 1. This case is incomplete, but still it bears sufficiently on the point under investigation. M —— was seized in the spring with a pain in the left arm, following the track of the cubital nerve, but not at first preventing the motions of the member. In a few days, the pain became so violent that the patient could not obtain any rest by day or by night. The cubital nerve swelled to a considerable size—equal to the little finger, and felt like a tense cord along the arm. No ease could be procured from any application, except from the immersion of the arm in warm water. This state of suffering lasted four months, the cubital nerve continuing all that time in the same swelled, rigid, and painful condition.

The author reasonably infers, that the symptoms of inflammation in the nerve here, were nearly as convincing as if the arm had been dissected. The pain was *permanent* too, which is a distinction between the neuralgiæ and the *neuro-phlegmasiæ*, if we may be allowed the expression. In the latter there may be remissions, but no clear intermissions.

Case 2. A man, of good constitution, had undergone great military fatigue, and exposure to cold for six months. On the 4th August 1812, he was seized with acute and lancinating pain at the bend of the right arm, and following the track of the median nerve. This pain ceased suddenly, and the following day was transferred apparently to the right knee, and along the internal saphena nerve. It continued a week in this part, and gradually disappeared.—Three days afterwards it fixed itself in the *left* arm, on the inside, extending from the arm-pit to the little and ring fingers. The pain daily increased, and the fingers above-mentioned were occasionally convulsed. On the 20th August, the patient entered the Hotel Dieu. The arm was now extremely tender to the touch, and the patient could hardly move it. The track of the pain was from the arm-pit along the inner side of the arm to the elbow, where it traversed round the internal condyle of the humerus, extending along the radius and terminating in the fingers aforesaid.—The cubital nerve could be felt enlarged and tense, especially between the elbow and arm-pit. The member was a good deal wasted, though it preserved its sensibility. The little and ring fingers were now paralytic.

Case 3. Dubuisson, 49 years of age, subject to piles from the age of 31, enjoying habitual good health, became affected, four months before he entered the Hotel Dieu, with pain exactly similar, according to his own account, to the case last detailed. He attributed his complaint to a suppression of the hæmorrhoidal discharge, and exposure to damp and cold The hæmorrhoids had been suddenly suppressed on the 10th June, when an acute pain took place from the shoulder to the fingers' ends of the right arm. This continued till the 17th, when he entered the hospital. The pain was now excessive, attended with a sense of formication, and an exacerbation every night. The radial nerve was felt tense and somewhat enlarged. When pressed, the increase of pain was felt along the whole course of the nerve. He could not move the arm. No redness or swelling of the integuments. The pulse was full and quick, the skin hot. A dozen of leeches along the nerve followed by a poultice with laudanum. Next day, pressure on the nerve produced no increase of pain. The same treatment. The pain gradually decreased, and the patient was well at the end of a fortnight from this time. The symptoms and the result prove, our author thinks, that the nerve was inflamed, and that the case was not simply Neuralgia.

Case 4. A woman, 43 years of age, having always enjoyed good health, although the menstrual discharge had ceased at 22, began

to feel pain along the left arm, in March 1810. This pain gradually increased, and became violent—extending from the shoulder to the fingers. A perpetual blister gave some relief, while kept open. But being healed, the pain along the inside of the arm became excessive, attended with numbness, sense of formication in the hand, and great increase of pain on pressure. In eight days after this, she became affected with pain in the other arm, and in the same direction. These pains continued, with more or less intensity, till the November following, notwithstanding various means were put in force to subdue them. She was ultimately worn out, and died on the 10th of the above-mentioned month, having been for some time paralytic of the upper extremities.

Dissection. The spinal arachnoid was red throughout a great portion of its extent, but the spinal marrow itself was sound. The median nerve of the left arm, for two inches after its separation from the plexus, was of a deep red colour, internally as well as externally. The anterior branch of the seventh cervical, which goes to the formation of the median nerve, was also red, but not so much so as the median itself. The other nerves of the arm were in their natural state. The brachial plexus on the right side presented nothing particular.

Case 5. A refractory conscript, of athletic constitution, after being chased closely through the woods, was at length seized by some gens d'armes, covered with perspiration, and in a state of delirious excitement. On the third day, this young man could not stand on his feet, nor could he stretch out his lower extremities. Excruciating pains were felt along the posterior part of the thighs, in the line of the sciatic nerves. The least attempt at motion aggravated these pains, and caused the patient to cry out. Inflammation of the lungs having supervened, this unfortunate youth died on the eighth day after the pains had commenced in the thigh.

Dissection. Passing over the state of the lungs, the sciatic nerves on both sides were enlarged to the size of the fore-finger, being also hard and resisting. Each filament of these nerves was distinctly visible, and separated from each other by a sero-sanguineous infiltration into the cellular tissue that unites them. They were penetrated by a multitude of small vessels which gave the red appearance to the nerves.

There can be no doubt here of the inflammatory condition of the sciatic nerves.

Case 6. A man of the name of Faucha, 47 years of age, entered the Hotel Dieu, affected with congestions of blood about the head, for which he was bled, and the symptoms were relieved. Three weeks afterwards he complained of pain along the posterior part of the thigh, with which he had been afflicted at times before.—This pain became excruciating. He attributed it, on this occasion, to cold he had caught the evening before. A blister gave no relief. The pain prevented, almost entirely, any motion of the limb, and was greatly exasperated by the least pressure made in the course of the sciatic nerve. The pain was constant, and of

nearly the same degree of intensity. Fever supervened, and became every day increased. On the sixth day from the commencement of the sciatica this man fell into a profound coma, and died three days afterwards.

On dissection, much blood was found extravasated into the lateral ventricles and the septum lucidum torn. The sciatic nerve, which was the seat of the pain, was somewhat larger than the other, and of a red colour from the hip to the ham. At the superior part of the thigh the nerve was enlarged, for two inches, to a very considerable thickness—and in this part it was of a violet redness. Blood was infiltrated between its filaments, and could be squeezed out from thence. Cut across, the nerve was equally red in the anterior as in the exterior, and was much softer at this part than in the other portions.

Case 7. A man, 68 years of age, entered the Hotel Dieu, in the month of January 1817, afflicted with inflammatory affections of the abdomen and also of the head. On the 19th February, he was seized with sudden and violent pain in the ischiatic region, extending someway down to the thigh. Blisters and repeated applications of leeches afforded little relief. On the fifth day from the invasion of the sciatica, the patient died of the cerebral disease. On dissection, arachnitis was found to obtain, and some organic changes in the abdomen. The sciatic nerve was then examined. It was sound from its origin till it emerged from the pelvis. For three inches in extent it was found infiltrated with purulent matter, which pentrated between its minutest fibrils. The surrounding cellular tissue was also infiltrated with the same.

Case 8. A child, 12 years of age, who had long been affected with symptoms of pulmonary phthisis, complained of lancinating pains in the thigh, proceeding from the ham up to the great trochanter of the left side. The next day brought a great increase of the pain, and in ten or twelve days the child was unable to move the limb. Pressure on the course of the sciatic nerve occasioned a numbness and pain throughout the whole limb. No cause could be traced of this disease. Every evening there was an exacerbation of the sufferings, but no distinct intermission. Leeches were twice applied, and each time with relief. The patient remained somewhat stationary and rather better as to the pain for about two months. The pulmonary affection, however, made progress, and death took place from that cause. On dissection, the lungs were found tuberculated, and several of the tubercles were in a state of suppuration. The left sciatic nerve was not sensibly increased in volume, but at its upper part it was bathed, for a considerable space, with a sanious pus, and completely separated from the surrounding muscles in several points. Between its fibrils some sanious pus was also found. In this part the vessels of the nerve appeared injected. In its other portions it was of its natural white colour.

This case was communicated to Dr. Martinet, by Dr. A. Goupil, who has long been prosecuting the study of infantile diseases.

Case 9. A man, 44 years of age, had been affected for eight days with pain in the course of the right sciatic nerve, which had commenced soon after exposure to cold when in a state of perspiration. The pain had daily increased in intensity up to the time he entered the Hotel Dieu. When received, it was found that the pain was increased by cold and diminished by heat. The least motion exasperated the patient's sufferings. Pressure on the sciatic nerve caused a numbness in the whole limb, and excruciating pain in the point compressed. The temperature of the limb was increased to the feelings of another person, and appeared burning to the patient. There was some slight pyrexia, generally augmented in the evening. The warm baths only were employed. One day he exposed himself to a chill after coming out of the bath, was seized with peritonitis, and died twelve days after he came into the Hospital.

Dissection showed the crural nerve increased to double the natural size for an inch and a half after its emergence from the pelvis. It was of a violet colour, and sprinkled here and there with spots of ecchymoses. The cellular tissue connecting the nervous filaments was injected and evidently inflamed. Above and below the point of lesion the nerve was in a natural state.

Case 10. A man, 56 years of age, had had a consecutive luxation of the head of the femur on the left side, and was in the Hotel Dieu for some months, when, on the 20th April, 1817, he was suddenly seized with such a violent pain in the thigh as to make him cry out. This pain was situated towards the ischiatic notch, and extended along the under side of the thigh and peroneal side of the leg to the malleolus externus. The slightest pressure on the course of the sciatic nerve, or the least motion of the limb caused considerable pain. Moxa was applied, but without relief, and various other measures were put in force with the same want of success. The pain continued unabated—fever became established, and the patient died on the 16th of May following.

On dissection, the parts about the hip-joint were found inflamed, suppurated, and some of them quite disorganized. At its emergence from the sciatic notch the sciatic nerve appeared of a brown colour, for the space of two inches, both externally and internally. Its density, at this part, was considerably diminished. There was no change in any other part of the nerve.

Reflections. From the preceding cases it will have been observed, that, in every instance where dissection was performed, and the parts brought into view, redness, more or less, of the nervous tissues was found—evidently dependent on injection of the vessels of the neurilema or membrane investing the pulp of the nervous fibrils. Partial ecchymoses, or sero-sanguineous infiltrations were also generally present, and sometimes traces of suppuration. In most instances the nerves were augmented in volume—but rarely soft-

ened in structure. The symptoms accompanying the lesions of the nerves consisted in more less complete diminution of their functions—in pain, either of a lancinating or benumbing kind—never suddenly intermittent, as in the neuralgiæ sine inflammatione—but generally continued, with occasional exacerbations and remissions. These symptoms are sufficiently characteristic of the neuro-phlogoses, which are much less frequently observed, however, than the mere neuralgiæ, or morbid alteration of nervous sensibility, without inflammation. The treatment of the former class must be clearly antiphlogistic.

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7. *Perforations of the Alimentary Canal** Many writers have noticed this pathological fact—and we all know the controversies that have been carried on respecting the cause of the phenomenon—some referring it to a living, some to a *post-mortem* origin. It is the object of Dr. Gairdner, however, to draw the attention of his brethern to some cases of infantile disease, remarkable on account of some very singular appearances on dissection—namely, perforations or erosions of the coats of the stomach—the former resembling those described by John Hunter, and attributed by him to the action of the gastric juice after death. We shall first give an abstract of the cases.

Case 1. Dr. G. was invited to the dissection of a child, on the 8th August, 1821. He learnt that it was 13 months old, and had been troubled with cough from the preceding January. About three weeks before death, the child became feverish, with a pulse at 160—respiration 70 in the minute, but without much heat of skin, which indeed was sometimes colder than natural. There was much expectoration with the cough, and alternate perspirations and diarrhœa. There was also occasional vomiting. Among the matters ejected by vomiting there was generally a quantity of purulent expectoration previously swallowed.—The child could not lie on its left side for three weeks—there was a swelling perceptible in the left hypochondrium. It was unable to suck—had an insatiable thirst—slept much, though easily disturbed—and had greenish evacuations from the bowels during the last three weeks of its life.

Dissection. Lungs much diseased, and full of tubercles on both sides, with abscesses on the left side. The contents of the stomach were extravasated into the abdominal cavity through a large opening in its left extremity near to its natural connexion with the spleen. The edges of the opening were ragged, soft, and extremely thin, with a slightly reddish tinge all around the perforation, forming, as it were, a narrow border, not a tenth of an inch in breadth. With this exception, there was no appearance, either in the stomach or neighbouring parts, indicative of vascular turges-

* Cases of Infantile Disease, in which erosions and perforations of the alimentary canal were found after death; with remarks. By John Gairdner, M. D. Fellow of the Royal College of Surgeons, Edinburgh. *Ed. Med. Chir. Trans.* vol. i. p. 311.

cence or inflammatory action. The opening was large enough to admit four fingers.

It is evident enough, as our author observes, that in this case, the pulmonary complaint was the primary disease, and this singular state of the stomach recently conjoined with it.

Of the next two cases (both in the same family, and both fatal) one was not examined after death, and therefore we are far from being so confident as Dr. Gairdner that the disease was perforation of the stomach. The child had been weaned nine days previously to its death. For seven days it had diarrhœa, and for the last three days, vomiting. "Coldness of the surface and extremities, a feeble, fluttering, irregular pulse, together with considerable emaciation and extreme weakness, preceded the fatal termination." However similar these symptoms may have been to those presented by children who died with perforation of the stomach, we certainly are not warranted, in the present state of our knowledge on the subject, to come to Dr. Gairdner's conclusion, without the demonstration of *post-mortem* inspection.

Case 3. A brother of the preceding, nursed by his mother, had enjoyed good health, and had every appearance of thriving till it was eight months old. At this time it was suddenly seized with a fit of violent crying—a thing very unusual with it. From that period the mother thought it looked less healthy, which was probably owing to a state of dentition. He was weaned at the end of eleven months, and on the day of weaning, was troubled with a trifling degree of diarrhœa. This went on, in a light manner, for a week, without any medical advice. On the evening of the 8th of June he had a powder, consisting of one grain of calomel and three of prepared carbonate of lime, which was repeated on the 9th, and operated with considerable power on the bowels. On the 10th, the bowel-complaint still continuing, he had a powder of carbonate of lime, rhubarb, and Dover's powder. 11th. Vomiting, and continuance of diarrhœa. A quarter of a grain of opium in a draught. 12th. Stomach still irritable—diarrhœa checked in the night, but returned in the morning. Emaciation and debility very evident, Pulse natural, as from the beginning—no heat of skin, or other febrile symptom. 14th. Langour and exhaustion to a great degree—ardent thirst—retchings—unrefreshing slumbers. 15th, aphthous specks on the tongue, but no ulcerations. The diarrhœa and emaciation progressively increased, and the child sunk on the 17th, or seventeen days from the first occurrence of vomiting. During the last two days of the infant's existence the stools consisted of mucus mixed with bile, and occasionally streaked with blood.

Dissection. "On opening the abdomen the viscera appeared at first sight to be all sound; but on slitting up that part of the omentum which joins the great curvature of the stomach to the transverse arch of the colon, the contents of the stomach were seen pouring out through several perforations in that viscus. These perforations were four in number; they were situated on the posterior surface of the stomach, not far from its splenic extremity; they were nearly of the same size, the largest scarcely big enough to admit the

point of the fore-finger. They were separated from each other by portions of the substance of the stomach, not so broad as the apertures themselves, and these portions were in an exceedingly soft state, and very thin. More of the internal coats appeared to be destroyed than of the peritoneal. No vascular turgescence, no adhesions, nor other marks of inflammation were discoverable. The gall-bladder was full of bile. The intestines appeared thin and semi-transparent, partially distended with air, and strongly tinged, in one or two places, by the transudation of bile: they contained scarcely any solid or fluid matter. The liver, mesenteric glands, and all the other viscera of the abdomen, were natural: so, also, were those of the thorax. In short, the disorganization of the stomach constituted the only deviation from the healthy structure." 320.

Case 4. A female infant which had been freely purged of the meconium, and which appeared to be doing well, was seized on the 13th day from its birth with a smart feverishness that lasted 24 hours, attended with intense heat of surface. There was no cough, vomiting, or diarrhœa: but a dark green matter was discharged from the bowels. The fever gone, the child remained fretful—had a tumid abdomen—drank often of gruel but refused the breast—lost strength rapidly, and died on the 4th day of its illness. "*Repeated doses of scammony were given*," and the warm bath was occasionally used. It was attended by Dr. Thatcher, who furnished the particulars of the case.

Dissection. There was matter in the left cavity of the chest; but the lungs on both sides were sound. Much flatus in the intestines, but scarcely any solid or liquid matter. The stomach was completely distended with fluid. "At its splenic extremity, near to the cardia, and on its posterior surface, a part of it appeared almost pellucid, as if the inner coats were dissolved." By everting the stomach this was found to be the case, as the peritoneal covering only remained, and some few fibres of the muscular. Two other smaller erosions were found a little farther from the cardia. "*All round these erosions the villous coat appeared loose and detached from the other coats, and had a slightly reddish tinge.*"

These four cases are all that our author has to produce from his own observation, but on a little research he found a great number of instances recorded by others. These he has reduced to a tabular form, and they may be perused with advantage in the volume of Transactions under review. We must necessarily pass them over.

In respect to the theory of the disease, it seems evident to Dr. Gairdner that the erosions and perforations described above, do not arise from ulceration "for they are found either without any indications of vascular action, or with only some slight redness of the villous coat." This does not appear quite so evident to us. Neither do we conclude with our author that wherever there is an aperture in the stomach, there must necessarily be extravasation of its contents into the cavity of the abdomen. The fact is, that every part of the stomach is at all times in close contact with

some other viscus, and, therefore, extravasation may not take place, although there exist a considerable aperture. Our author adopts the Hunterian doctrine, that these perforations are attributable to the solvent action of the liquids of the alimentary canal after death. "The presence of such appearances, in some cases, and their absence in others, may depend on variations in the quantity and quality of the contained fluids, and also on peculiar states of the containing parts, which render them of more or less easy solubility." It is the peculiar *softening* then of the coats of the stomach and bowels, occurring in infants, that constitutes the disease in question, according to our author. The following are Dr. Gairdner's therapeutical indications.

"Notwithstanding the absence of every appearance of vascularity of the stomach in many instances of this disease, it is evident that some degree of vascular action must attend its commencement, since it is hardly possible to account for the effusion of fluids between the coats of the stomach and intestines by any other hypothesis. I would therefore propose, if the child is tolerably stout, to abstract blood in this stage, and I should be disposed to apply a blister over the epigastrium, with a view to abate the local determination towards the vessels of the stomach. Both these remedies should evidently be applied *as early* as possible. Cruveilhier employed blisters, but applied them to the inside of the thighs, and they do not appear to have done any good. There are two other remedies, from both of which I have seen some benefit, or at least some temporary alleviation. I mean opiate enemata, and the warm bath. The former tend to check the diarrhœa, and they have both considerable influence in diminishing irritation. I should be disposed to avoid throwing into the stomach any food or drink calculated to irritate, either by its nature or by its quantity; and I should particularly avoid medicines of almost every description, but especially those of a purgative nature." 353.

It is evident, we think, that Dr. Gairdner has thrown little light on the nature of the perforation of the coats of the stomach. He contends, indeed, that it is *not* owing to inflammation or ulceration; but, we think, not very successfully. For our own parts, we are still disposed to attribute it to an inflammatory origin.

In an appendix, Number 2, a case is communicated to our author by Professor Alison, but contains nothing extraordinary.

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8. *Gastritis—or Softening, Extenuation, and Destruction of the Mucous Membrane of the Stomach.* M. Louis of Paris, has lately published a paper on this subject, in the *Archives Generales* for May —much more minute and refined, we fear, than useful or practical. Some instruction, however, is to be gleaned from it, and this we shall convey in as few words as possible. Twelve cases are detailed as the basis of the author's inferences and reflections. We shall notice the *post-mortem* appearances before the history or symptoms.

1. *Autopsic Phenomena.* The stomachs presented nothing particular externally. Internally there were sometimes patches of a pale white, but much more frequently of a blue colour. The mucous membrane, in the points corresponding with these appearances, was very thin and soft, transformed, as it were, into a glairy mucus. These spots were sometimes rounded and continuous—sometimes disposed in long and narrow bands. A slight examination would have led to the idea that, in these places, the mucous coat was entirely destroyed—and frequently there was actual destruction, but to a very small extent, of the membrane. Various degrees of this lesion, from slight extenuation to entire destruction of the mucous coat, were sometimes observed in the same stomach—exhibiting the progress of spontaneous perforation. These phenomena were sometimes detected in the lining membrane of the œsophagus, at its lower portion.

2. *Symptoms.* In most of the individuals there had been derangement of the digestive organs for a considerable period previously. The digestion had been disordered—and, in many cases, there had been wasting of the flesh, and loss of appetite. In some, there were pains in epigastrio, acidities, &c. The *immediate* symptoms were great diminution of appetite—gastralgia—shivering, followed by heat, thirst, and after a period, varying from a few days to a month or two, nausea and vomiting. These symptoms remained till death, sometimes permanent, most commonly intermittent. The only *invariable* symptoms was nausea—in nine out of twelve there was vomiting—in eleven out of the twelve there was epigastric pain. The appearances of the tongue were various and uncertain. In four out of the twelve patients, it was natural.—*Diarrhœa* existed in the majority of the cases—and also *phthisis.* Its progress varied from a few weeks to many months The diagnosis can only, if at all, be gathered from the symptomatology. The *nature* of the disease appears to be inflammatory—sometimes acute, sometimes chronic. In respect to *prognosis*, little can be said—as in no case was the disease seen uncomplicated—in the majority of instances it was secondary of a mortal affection, *phthisis* for example. Its causes are totally unknown.

We have thus given a short account of a paper which has occupied many pages of our foreign and domestic cotemporaries. As we said in the outset, we do not think it likely to contribute much towards the advancement either of pathology or therapeutics. It bears, however, on the subject of Dr. Gairdner's preceding paper.

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9. *On some Diseases of the Stomach.* By M. BOURDON.*—These cases occurred principally under the eye and in the wards of professor Fouquier, and appear to be narrated with great fidelity and

* Recherches sur quelques maladies de l'estomac, observées à la clinique de M. Le Professeur Fouquier. Par M. Isid. Bourdon. [*Revue Medicale, Mai,* 1824.

freedom from bias:—they are therefore valuable facts, and deserving of record. We shall, however, considerably abridge, as is our usual custom, the original documents, while nothing of importance shall be passed over in silence.

Case 1. A man (Lesage) 71 years of age, a shoemaker by trade, till the age of 53, when he lost one of his arms, and then changed his employment to that of a porter. He asserted that he had enjoyed good health till the year previous to his application. At that period, a swelling in the epigastrium, which had not before caused any inconvenience, became painful and increased in size, with loss of appetite, difficult digestion, and nausea. Finally vomitings came on, especially after eating any solid food. He changed his diet to liquids, and the vomitings ceased for some months, when they returned, accompanied by colicky pains and constipation of the bowels. A fall at this period aggravated all the symptoms, and he was obliged to seek refuge in La Charité, August 1819. He was now meagre, yellow, his countenance indicative of great suffering. He vomited always about an hour after taking food. The epigastric tumour was large, and had augmented rapidly, according to the patient's account, since the constipation came on. A diarrhœa supervened after using some lavements, and the tumour lessened in size till it was no larger than an egg. It was irregularly rounded, situated to the right of the xiphoid cartilage, and two inches below it—very moveable in all directions, but particularly in a line from left to right—pulsatile in accordance with the action of the heart and arteries. It was considered to be an aneurism of the aorta or cœliac artery. The pulsations continued in it, whatever position was assumed by the patient, or to whatever side the tumour was pushed by the hand. The pulsation was occasionaly perceptible to the eye as well as to the touch.

The nausea and pains continued, especially after taking food or drink—with progressive emaciation, and gradual abolition of all the senses, except that of sight, which remained unimpaired. At length dropsical effusions into the cellular membrane of the lower extremities took place—then in the trunk, with difficult respiration. The abdomen became swelled, painful, and sonorous at the epigastrium, with fluctuation in the hypogastrium. Fever came on, and death terminated his sufferings on the 25th August.

Dissection. Passing over some minor details, &c. to the abdomen. The peritoneum was inflamed and covered with false membranes in some places. It contained a yellowish effusion. The pyloric orifice of the stomach presented a rounded swelling, which did not extend to any other portion of that organ, nor to the duodenum. The passage was contracted, but would still admit the point of the little finger. The tumour was of a scirrhous nature. The pancreas underneath the tumour was sound; but the neighbouring lymphatic glands participated in the diseased state of the pylorus, and pushed that part forwards. In the centre of this scirrhous mass (beneath the pylorus) was found running a large artery, which proved to be the superior mesenteric, near its origin. It was this,

no doubt, which caused the pulsation in the tumour. The thoracic duct was pressed upon by the tumour and narrowed. This circumstance tended no doubt to accelerate the emaciation.

Case 2. A man, 35 years of age, had been a soldier for a considerable time, and then took to the trade of a shoemaker. In early life he had been subject to nasal hemorrhages, which were stopped by the habit of taking snuff. Later in life he became affected with a quartan ague, which lasted twenty three months, and was ultimately cured by tonics. From this period he suffered from indigestion and occasional diarrhœa. The disease, which brought him to the hospital had commenced two years previously. It was a sense of constriction at the epigastrium, which was soothed by taking food. This constriction was accompanied by sensations of dragging in the region of the stomach, a great afflux of saliva to the mouth—nausea—painful and tedious digestion—and latterly vomitings, with constipation of the bowels—emaciation—and pyloric jaundice, (l'ictere pylorique.) The vomiting did not come on till a considerable time after eating. Two or three times he brought up a quantity of half coagulated blood. He died four months after he entered the hospital.

Dissection. The emaciation was not so great as in cancerous affections of the stomach in general. The stomach was found adherent, towards the lesser curvature, to the liver, over the space of several inches. In the centre of this adhesion the stomach was ulcerated, the ulcer penetrating into the substance of the liver, and being surrounded with callous edges. Excepting where the ulcer was situated, the rest of the liver was sound. The pyloric orifices was contracted.

Case 3. Claudie Dubois, a shoemaker, 29 years of age, of feeble constitution, bilious temperament, and a native of Paris, had also been a soldier, and had, in that capacity, contracted several times both syphilis and scabies, of which he had been badly cured. In August 1810, he got a fever, and an inflammatory bowel complaint, which last returned several times, and was accompanied by violent colicky pains and some pyrexia. Strong drastic purgatives were administered to him at this time, which produced copious evacuations upwards and downwards, followed by great emaciation, increase of the colick, and much debility. He was obliged to enter the hospital St. Antoine, where he was treated for misplaced or retrocedent gout, without success. He left that hospital and came to La Charité, in October of the same year. He was now jaundiced, emaciated, harassed with pain in the abdomen, especially when he lay on his back. He had most ease when lying on the right side. His tongue was loaded, but he retained his appetite.—Digestion was slow and painful, particularly when he ate vegetables. He had the colicky pains often before eating. He never had any nausea or vomiting. He was constipated, but the constipation easily yielded at any time to gentle aperients. He experienced in the evenings flushings of heat, radiating from the epigastrium to the face. The right

hypochondrium was sensible to pressure—the abdomen was a little swelled—the lower extremities œdematous—the urine abundant—the pulse always quick—a dry cough. He died in April 1810, never having experienced either nausea or vomiting to the last.

Dissection. A large fungous ulcer was found in the stomach, forming a band round its interior surface, at which place the coats of the organ were half an inch in thickness. The stomach adhered to the liver, but without ulceration at that part. It was also adherent to the pancreas, which was scirrhous. The liver was wasted. There was a scirrhous patch towards the termination of the jejunum—and some ulcerations of the mucous membrane, exhibiting no cancerous characters.

It is remarkable, that there should be no nausea or vomiting in such an extensive ulceration of the stomach. This is attributed by M. Bourdon to the sound state of the pylorus. He thinks also, that the universal adhesion of the stomach to the neighbouring viscera must have taken away the power of vomiting.

Case 4. A man, 40 years of age, who, for 39 years, had enjoyed good health, was affected with fever and inflammatory diarrhœa in the month of September 1807, which gave way to the usual remedies. Two months afterwards, he felt, at the pit of the stomach, a weight and also lancinating pains, which were always worse towards evening and in the night. These symptoms went on increasing, till he came into La Charité in the month of February, 1808. He then complained of a painful lancinating heat in the epigastrium. No head-ache—no yellow tint in the complexion—respiration free and natural—but he was easily put out of breath by the least exercise. The pit of the stomach was sensible to pressure ; but there was no perceptible tumour. He had no appetite—eructations after meals, the uneasiness remaining the same. He had neither constipation, vomiting, nor even nausea. The evacuations from the bowels were natural in all respects—but the digestion was slow, painful, and accompanied with much disengagement of air. He became greatly emaciated, and died rather suddenly under great pain, which opium had not the power to mitigate.

Dissection. The body of the stomach was sound. Its pyloric orifice alone was affected. There was here a small tumour round the orifice, the internal surface of which was ulcerated, which ulceration extended a little way on the mucous membrane of the duodenum.

Here, too, there was absence of nausea and vomiting, although the pylorus was ulcerated. The passage, however, into the duodenum was free.

Case 5. Galet, aged 62, a coal-porter, had always enjoyed good health and embonpoint. Even the day he entered the hospital, he was in good spirits, had a florid complexion, and exhibited all the attributes of a sanguine temperament. He had lately become affected with sharp pains in the epigastrium after the sudden healing of an old ulcer on the left leg. From that period he was troubled with acid eructations, and vomiting. He emaciated and

got weak. He bartered his provisions for wine, which he took in excess. But this did not prevent the pains in the stomach, the vomiting, and the constipation, which was very obstinate.—The physician considered the disease as gastritis, and the patient was twice bled at short intervals. The bleedings seemed to mitigate the pain; but two days after the last venesection, the patient died suddenly.

Dissection. Water was found in the cavity of the peritoneum—tubercles in the liver—a cancerous ulcer in the cardia of the stomach, the rest of the organ being sound.

This case goes to prove that no temperament is secure from cancer of the stomach—that scirrhus of the cardia brings on death more quickly than that of the pylorus, and without so much marasmus or sallowness of the complexion—that scirrhus of the stomach may be mistaken for gastritis—and finally, that venesection is rather a hazardous remedy in such a case.

A few observations are here introduced from the pen of Professor Fouquier, relative to the treatment of this melancholy class of human afflictions. It is needless to observe, that this can only be palliative. The great objects are to mitigate pain and supply nourishment to the patient. The medicinal and dietetic substances which have been found most beneficial in Professor Fouquier's practice, were those which present a natural or artificial combination of light bitter or aromatic principle with a nutritive. Such is to be found in a decoction of iceland moss with milk—gruel and syrup of cinchona—light bitter infusions, &c. Calcined magnesia, and the carbonic acid have been occasionally found useful. Blisters to the epigastrium have sometimes suspended the vomitings.—Glysters of broth and other nutritious substances are also to be had recourse to when the debility and emaciation are making progress.

Case. 6. M. Delacour, a septuagenarian, of bilious temperament and melancholic disposition, had experienced for years past a sense of weight in the epigastrium, with irregularity of bowels, diarrhœa and constipation alternating. Two years previously to the date of report, he had dried up an old ulcer on the leg, since which the gastric affection increased—the appetite failed—the digestion was slow and painful—emaciation advanced—nausea but not vomiting obtained. On examination a small rounded tumour was felt a little below and to the right of the umbilicus. It was moveable, and painful on pressure. M. Fouquier pronounced its seat to be in the intestine or pylorus. The pain in the tumour was always most severe when diarrhœa was present. At all times, however, he felt as if a bar was across the hypochondria. Debility and emaciation now made rapid progress—the lower extremities became œdematous—colicky pains were excessive, and obliged him to use opium—the tumour enlarged in size—paralysis of one side took place a month before death closed the scene. He had no vomiting at any period of the complaint.

Dissection. There was a fungous ulceration embracing the interior of the right extremity of the stomach and including the pylorus. The exterior coats of the stomach, corresponding with this ulcera-

tion, were an inch in thickness. The left extremity of the organ was sound. There was an adhesion between the liver and the diseased portion of stomach, and the ulceration appeared to have penetrated to the substance of the former organ, which was scirrhous at that part. The colon also adhered to the scirrhous stomach, but its mucous membrane was not diseased, though somewhat phlogosed.

Case 7. A rope-maker, 48 years of age, had experienced some difficulty in swallowing for two years past. The food, in passing down, caused pain along the œsophagus extending to the stomach. During digestion the patient felt a sense of weight and distention in the stomach, with frequent acid or gaseous eructations:—There were occasional vomitings—but no derangement in the function of the bowels. The appetite continued, though the digestion was slow and uneasy. The abdomen at length enlarged, and fluctuation became evident. It was also tender to pressure, especially towards the hypochondria. Emaciation made progress—the lower extremities became œdematous—and death at length closed the scene.

Dissection. The coats of the stomach were found scirrhous, and thickened throughout their whole extent. The interior also presented a crowd of vegetations or excrescences, about the size of peas. This diseased state did not extend beyond the cardiac or pyloric orifices.

Here it is evident, that vomiting was induced, not from the contraction of the stomach itself, but from the action of the abdominal muscles—a pathological fact that bears on the disputed physiology of vomiting in a very forcible manner.

Case 8. Cecilia Charpentier, 61 years of age, had enjoyed good health from infancy, and continued to menstruate till the 50th year. About twelve months before the date of report, she had erysipelas of the face, accompanied by fever and delirium. While convalescing from this complaint, she began to feel pain and sense of heat in the epigastrium. At night the pain was more violent, and became lancinating—often causing her to lie on her face in bed to procure some ease. The appetite now gave way—the embonpoint disappeared daily—the nights were passed without sleep—for pain and perspiration left her no intervals of ease. When examined at the hospital, the physicians felt, though obscurely, a tumour in the epigastrium, of uneven surface, and stretching towards the umbilicus. From this place the pains radiated to the spine and mammæ. The respiration was free, and no suspicion was entertained of any disease in the chest. Œdema now took place over the body, and even the face. There was no nausea or vomiting; but a considerable flow of saliva from the mouth. The pulse was frequent—water fluctuated in the abdomen—diarrhœa supervened, and death closed the scene.

Dissection. The right lung was hepatized throughout two thirds of its volume. When squeezed, a quantity of purulent-looking matter issued forth, as is usual in lung long hepatized. The

liver descended low, and was adherent to the lesser curvature of the stomach. The tumour felt during life, was formed by the stomach and the glands in its neighbourhood. On the internal surface of the lesser curvature of the stomach, and near the pylorus, several fungous excrescences were found, leaving the pyloric orifice, however, free.

It was remarked in this woman, that *pressure* always mitigated the abdominal pain—"an almost infallible indication," says M. Bourdon, "of adhesion between the stomach and some neighbouring viscus, especially the liver." On the contrary, the pain was always increased by the *decubitus dorsalis*. The most remarkable phenomenon, however, in this case, according to M. Bourdon, was the fact of the hepatization of the lung escaping the notice of the physicians. We do not wonder at this circumstance, considering the severe abdominal disease, which was capable of masking a far greater extent of pulmonary affection than existed in this patient.

M. Bourdon makes some observations on, and draws some conclusions from the foregoing cases; but they are such as will readily occur to the mind of the practitioner, on perusing the documents which we have now laid before him.

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10. *Abscess in the Parietes of the Stomach.** A curious case of this kind is related by Surgeon Callow. A man officiated as hospital cook, in the 96th regiment, till the day of his admission, 34 hours prior to his death—no antecedent indisposition being complained of, except loss of appetite, sickness, and diminution of strength. When received into hospital, he had violent pain in epigastrio, incessant vomiting, quick pulse, cool skin, brown and dry tongue, constipated bowels. In a short time, the pain shifted to, and became fixed at the umbilicus, assuming the character of enteritis. In 24 hours, one hundred ounces of blood were abstracted, locally and generally; but the patient suddenly expired in a violent fit of vomiting, having passed a quantity of purulent matter by stool.

Dissection. Diffused inflammation over the small intestines. A quantity of bland pus floating among the viscera, and issuing from a lacerated aperture in the small curvature of the stomach around which the coats of this viscus were in a state of disorganization.—All the other viscera were sound. It is supposed by Mr. Callow, and with reason, that the pus must have been contained in a cyst. It amounted in the whole to more than seven pounds. While in the cyst, it appears to have excited little irritation; but the moment the cyst burst and the matter came in contact with the mucous surfaces, they were excited into a state of inflammation.

The dissection of the above case nearly cost Mr. Callow (an able and meritorious medical officer) his life. The thumb of the right hand was pricked by a spicula of bone, while being immersed

* Surgeon Callow, 96th Regiment. Med. Journal, No. 306.

in the purulent matter. At 12 o'clock of the next night, while on a journey to London, Mr. C. was attacked with acute pain in the thumb, and soon after a shivering fit. The journey was persevered in although the pain invaded three of the other fingers, and violent rigors rapidly succeeded each other. Arrived at the end of his journey, he retired to a warm bed, and medical assistance was summoned. A deadly coldness prevailed for some hours, more especially in the lower extremities, which were nearly destitute of circulation. The hand swelled, and the pain extended up the fore-arm. A violent reaction succeeded the cold stage, and the sensations during this paroxysm were of a most insupportable kind—"bearing a stronger affinity to an attack of hydrophobia than to any other disease to which it could be assimilated." The headache was so violent "that the brain appeared on fire," while rapidly succeeding spasms of the diaphragm threatened to suspend respiration. Deglutition of fluids was exceedingly difficult, while thirst was excessive. Vivid red streaks in the course of the lymphatics indicated the progress of absorption. The warm bath produced much relief, while leeches to the arm diminished pain, for a time—then all the symptoms became exasperated. The same measures were again and again put in force, with temporary benefit. The axillary glands swelled. A paroxysm took place every twelve hours regularly, at which periods there was much pain in the right side of the thorax, attended with difficult respiration. The progress of the absorption seemed stopped at the bend of the fore-arm. After the fourth day, there was great disposition to the formation of depôts of matter in the arm, but fortunately they did not take place. After a week, some amendment took place, though slowly. At the time of writing (five weeks from the accident) the functions were much deranged, and Mr. Callow has lost the use of his hand.

We congratulate him on the preservation of life. Few have lived to tell the tale, after being in his condition.

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11. *Cynanche Trachealis.** Dr. Meyers, of Manningtree, has lately published some cases of this formidable disease, accompanied by judicious observations on its pathology and treatment. He justly considers it as the result of inflammation of the lining membrane of the trachea, on which an extensive morbid secretion is thrown out, quickly assuming a thick gelatinous consistence, and consequently preventing the action of the air on the blood in the lungs. The first case related by Dr. Meyers proved fatal on the fifth day of the attack, and twelve hours after our author saw him. The disease therefore may be said to have had its own way, and the appearances on dissection, under such circumstances, are interesting.

"Upon laying open the trachea, from the cricoid cartilage to its termination in the bronchial tube, I found the whole cavity so

* Dr. Geo. Meyers. Med. and Phys. Journal, October 1824.

completely locked up with dense coagulable lymph, that I could with difficulty pass the handle of my knife along. I carefully at length separated a large portion of it, and was struck with the florid appearance of the internal coat of the trachea, much resembling scarlet cloth as to its colour. It will be observed, this disease had been of five days' standing only, and must indisputably prove the rapidity with which it advances, and the impracticableness of removing it when thus formed and fixed. This dissection likewise throws additional light upon the treatment necessary to be adopted and pursued; and, although it may not afford any reason for employing a fresh or novel plan, most unquestionably tells us that our efforts hitherto made must be more vigorously followed up." 299.

Our author's plan of treatment is judicious. Bleeding, local, and general—blistering—purging, and the exhibition of mercury, are to be had recourse to, and put in force without loss of time. Emetics are highly useful in this disease, both as checking the inflammatory exudation, and loosening it when formed.

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22. *Perforation of the Intestines.* In the ARCHIVES for September last, there is a case of this kind by Legallois, with comments on it by Bouillaud. The patient was a watch-maker, 23 years of age, admitted into the Bicêtre in January 1823, for pains in the abdomen, which yielded, and he was discharged. In the beginning of May he returned, and an irregular tumour was detected in the abdomen, occupying apparently its whole extent, but more conspicuously the right iliac region. The pulse was frequent and contracted—skin dry and harsh—abdomen tense, like the parchment of a tambourine, but without meteorismus. Pressure gave pain. Antiphlogistics and counter-irritation gave no relief. He became harassed with porraceous vomitings and a colliquative diarrhœa. Emaciation advanced—he passed substances resembling portions of the intestines themselves, and died, after fifteen days of suffering in complete marasmus.

Dissection. When the peritoneal cavity was laid open, a quantity of matter, similar to that which had been passed by stool, issued forth. All the abdominal viscera were glued together. The omentum was very much thickened, and adhered to the circumference of the pelvic basin. The convolutions of the intestines were agglutinated, and seemed as if macerated in the liquid contained in the abdomen. The pelvis was a complete sink, in which were collected all the fæcal matters that had escaped into the peritoneal cavity from the cœcum and descending colon, both of which were full of perforations. The peritoneum was red throughout, and, in some places, approaching to gangrene. On this agglutinated mass was seen a multitude of small productions of a whitish caseous matter, varying from the size of hemp-seed to that of a large pea, evidently of a tubercular nature. The liver and stomach were natural in their internal structure. Throughout the large intestines there were many perforations—fifteen at least, the smallest of which were of the size of a two franc piece, and the largest more

than two inches in diameter. These last chiefly occupied the cœcum and tranverse colon. The latter portion of intestine was double its natural length, being several times folded on itself in the right iliac fossa. All these perforations were without adhesions. In some, the margins were smooth, and had cicatrized appearance. There were several perforations in the small intestines, but these were closed by adhesions existing between their convolutions, and between them and the neighbouring organs.

M. Bouillaud, in his comments on the above case, mentions an instance which came under his own eye, in the Hospital Cochin, where the intestines were perforated like a sieve. The patient died of pulmonary consumption complicated with uteritis. If it be asked how life is preserved, for some time, under such circumstances? it may be answered that, effusion of the fæcal contents is not a necessary consequence of perforation of the intestinal tube. Nature often repairs with one hand the ravages she is committing with the other. It is sometimes so here. The adhesions formed during the inflammation preceding the erosion, occasionally check the issue of fæcal matters out of the intestines. It sometimes happens also that openings are formed through the adherent portions of intestines, and thus false passages made from one convolution into another. Openings of this kind have taken place between the intestines and bladder—and even between them and the uterus. Such temporary checks of the fæcal effusions only occasionally take place. More frequently the intestinal contents get abroad into the general cavity, and the consequent peritonitis accelerates the fatal event.

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13. *Suppression of Urine.** Suppression of the urinary secretion is, at all times, a most formidable disease. There are some peculiarities, however, in the following case, which render it remarkable.

Mr. Robinson, 41 years of age, corpulent and robust, of sober habits, and by trade a brazier, had been for three years subject to gout of an irregular kind. On the 4th April our author was called to him. He was just recovering from an attack, which had stopped suddenly on the 2d. He had now pain in the left iliac region —the tongue was clean—pulse regular. Castor oil and tincture of senna were given, and caused three or four bilious dejections, with complete relief. 6th. The pain in the iliac region returned—pulse 70, and full. Leeches to the pained part. One grain of opium, three of calomel, and ten of extract of colocynth. A turpentine glyster in the evening. 7th. Informed our author that he had passed no water since the morning of the 5th. Is now free from pain. Pills of calomel and aloes opened the bowels freely. The catheter was introduced, but no urine came away. 8th. He slept during the night, and said he felt quite well this morning, were it not for the stoppage of water. Tongue clean—pulse 70—no headache. Twelve ounces of blood to be taken from the arm. *Even-*

* Dr. Teeling. Dublin Transactions, vol. iv.

ing. Blood buffed—had four liquid stools—no urine. Warm bath —blister to the region of the kidneys—a diuretic mixture. 9th. Dr. Percival in consultation. No urine. Slept in the night. Fourteen ounces of blood to be drawn from the arm—the bath to be repeated—two grains of calomel and two of camphor to be taken every two hours, with a saline diuretic draught. 10th. Four stools yesterday—no urine, except five or six drops—slept some in the night. Has taken two drops of the oil of cajeput every four hours in addition to the other medicines. The same to be continued. 11th. Took an aperient last evening, which operated well. A few drops of urine passed three or four times, amounting in the whole to about half a drachm—pulse 80, soft and regular. The medicines to be continued. *Evening*. Had smart gouty pain in both knees for four hours—then suddenly ceased. 12th. No material alteration. The gums are affected by the mercury—some flying pains in the left hypochondrium. *Evening*. Passed about 24 drachms of pale yellow urine at four efforts. Six leeches to the region of the left kidney. 13th. Slept eight hours—passed a little urine with his stools. Passing on to the 16th, Dr. Tuomy met them in consultation. The patient had had little sleep in the night—was disposed to be incoherent this morning—pulse 80—hiccup—great anxiety—abdomen appears somewhat tympanitic—no urine. 17th. Stools passed involuntary—no urine—convulsions—extinction of voice. 18th. Died comatose.

"*Dissection*. The omentum was diseased, and both kidneys were surrounded by an immense quantity of fat. The right kidney was diminished in size: the cavity of its pelvis was filled with calculi, of a whitish-grey colour, and rough surface, many of them as large as small peas. The whole internal or secreting surface of the kidney was firmly coated over with a fine kind of gravel, resembling pulverized free stone; and in the upper part of the ureter belonging to it a calculus was found, as large as a small almond, which completely blocked up the passage. No urine whatever appeared to have been secreted in this kidney.

"The exterior of the left kidney was of a purple-red colour. In its pelvis there was a small quantity of urine, together with a few calculi similar to those found in the right kidney, but there was none of the coating gravelly matter. The bladder contained a few calculi, and some urine. The other abdominal viscera were perfectly healthy." 180.

It is evident from the above case and dissection, that it was the cessation of *function* in the kidneys, rather than any alteration of structure, which caused the death of the patient.

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14. *Hepatic Phthisis*.* That hepatic disease often simulates, and what is worse, often produces disease in the lungs, must be known experimentally by every attentive practitioner. But the difficul-

* Sir T. Moriarty. Irish Transactions, vol. iv.

ty of ascertaining when real disease of the pulmonary structure has actually commenced, can only be known to those who watch with zeal and assiduity the phenomena of disease in the living body, and mark well the ravages which it leaves in the organized structures after death.

The subject of the present paper was a married lady, about 35 years of age, who, for some years, had been afflicted with severe pains in the stomach, for which aromatic tinctures, ether, and even opium, were had recourse to. She was of temperate habits, apparently scrofulous, and had borne children. At length a teazing cough came on, with dyspnœa and occasional hæmoptysis, followed by evening fever and night sweats. Previously to our author's attendance, she had had head-ache and hemiplegia, but from these she was entirely recovered. She was considered as phthisical, and ordered milk diet and country air. This was in 1804, when Sir T. M. first saw her. On examination he was struck with the absence of any emaciation or acceleration of pulse. He found nearly the entire of the convex surface of the liver indurated and uneven to the touch. "Both lobes were evidently diseased." She complained of acute pain in the right acromion and between the scapulæ—tongue furred—bowels slow—catamenia regular. For the present she was advised to remain in the country—to regulate the bowels with senna and tartarised soda, and to use camomile tea acidulated with sulphuric acid. After some months she returned to town (Roscommon) much improved in appearance. Still she had recurrences of the hæmoptysis; but as this was considered as merely symptomatic, half a drachm of mercurial ointment was ordered to be rubbed in every night on the right side. When about an ounce of the ointment had been used a smart mercurial fever prevented its further exhibition, the gums being slightly affected. She soon recovered from this; but a considerable period elapsed before the remedy could be resumed, (for what reason is unknown.) The interval had been spent in Dublin, under the care of Dr. Plunkett, who tried the nitric acid and saline bitters, without any advantage. After a period of seven months the head-aches returned—the vessels of the eye became turgid—the pupils permanently contracted on the application of light—with sense of swimming and confusion in the head. These symptoms were soon followed by another attack of hemiplegia, which soon gave way to leeches, blisters, &c. At the solicitation of the patient, Sir T. M. was induced again to try mercury, after an interval of twelve months from its former exhibition. A recurrence of febrile irritation and sharp pain in the side again suspended the use of mercury. The side was relieved by leeching. During the two subsequent years the patient had frequent hæmorrhages from the lungs. One night, at midnight, our author was called up to witness the following phenomena:—

"The mouth gaped open, the lower jaw hung, as if dislocated, on the sternum, with such sudden agitations of it against the upper one, as imparted a tremulous motion to the whole body and bed. This gaping posture sometimes continued for minutes, and presented to the eye all the appearance of dislocation.

"Liniments with laudanum, ether, camphorated spirits of wine, and turpentine, were tried without any advantage. It at length occurred to me that pressure on that twig of the third branch of the fifth pair of nerves, which passes through the foramen at the chin, might be beneficial; the experiment succeeded, the oscitation having immediately ceased. On removal of pressure it again returned, but was stopped by permanent pressure; a silver coin was kept on by a bandage.

"This vibrating oscitation returned frequently at subsequent periods, but was always removed by the same means, which the patient herself was now in the habit of applying." 19.

Our author now determined to adopt a merely palliative treatment. The side was genenally relieved, for a time, by leeches, and the head by blisters. At length she was attacked with severe paroxysms resembling asthma, from which she was always relieved by assafœtida glysters and tincture of senna. These usually brought away much bilious and slimy fœces. The liver still continuing apparently to be diseased, mercury was a third time resorted to, and with the same effects as before. The physician now resolved to leave the complaint to nature, merely keeping the bowels soluble. "During the following year she had frequent shiverings; the induration of the side felt softer, and more elastic, and suppuration appeared evidently to have taken place. She was at length seized with symptoms of dysentery; the side became more flaccid and shrunk; the tormina and tenesmus were excruciating. Frequent enemas, and purgatives of calomel and cathartic extract, brought off incredible quantities of fetid, sanious, and purulent matter: quantities of pus were also suspended in the urine, which produced much irritation in its passage through the urethra. In some weeks the dysenteric symptoms abated in violence; but for a period of more than a year, evacuations of purulent matter, and with it quantities of a gritty substance, like coarse sand, continued to pass by stool; any delay of it in the rectum excited torture, and required constant enemas and brisk purgatives for its removal.

"The pulse, which hitherto showed little variation, now lost its intermission; the primary, as well as secondary symptoms of her disease, gradually disappeared; but extreme debility succeeded, which neither tonics, generous diet, or change of air, could prevent from increasing. The blood appeared deoxygenated, and the capillary vessels to have lost their tone. The surface of the body became covered with large purple ecchymoses: blood flowed from the uterus, the rectum, the lips, the nose, and the skin, and the legs swelled; to these bandages were applied; the mineral acids were given abundantly in water, or infusion of roses or cinchona, as the state of the stomach admitted, and claret was given in a reasonable proportion. Under this plan she rallied surprisingly, and was enabled to take exercise in a carriage; this was in 1813, After some months of gradual recovery, she persuaded her husband to reside in Dublin, where, after a short residence, she expired." 21.

The above is certainly a remarkable case. There can be little doubt, we think, that both the cerebral and thoracic symptoms

were sympathetic of the diseased liver; but we consider it quite a misnomer to call the disease hepatic phthisis. Hepatic *hæmoptysis* it might have been at one time; but assuredly there were no evidences, that we can see, of *phthisis* in any stage of the complaint. One remark more, and we have done. Where the liver is so disorganized as to be felt indurated and knotty by the hand, it is madness to exhibit mercury, with the view of salivation. Local depletion and continued counter-irritation, with gentle aperients, and slight alterative doses of mercury, will do far more than salivation.

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15. *On Anomalous Gout.* By A. L. G. Bayle.* Few diseases are involved in more obscurity than gout, whether we look to its nature, or its treatment. Few diseases veil themselves in more disguises than this proteian malady. The multiplicity of its symptoms, the complexity of its forms, and the obstinacy of its course were such as to attract the attention of physicians in all ages, since the days of Hippocrates. But they have all failed in ascertaining its proximate cause—and what is of more consequence, its cure. M. Bayle, has, in the paper under consideration, brought forward some curious examples of the numerous metamorphoses which gout undergoes, and which show the necessity of being acquainted with the masks which it frequently assumes, as well to avoid errors of diagnosis, as to apply a rational method of treatment.

Case 1. Madame G——, 40 years of age, of a nervous temperament and delicate constitution, had enjoyed good health till the age of seventeen. Her grandmother had been a martyr to gout. In the course of her first pregnancy, and when only in her seventeenth year, she had an attack of strong convulsions in the muscles of her limbs and face, which lasted about half an hour. Ten years afterwards she had a similar attack in her second pregnancy, the day after being bled. During the last five or six years, domestic afflictions have rendered these paroxysms much more frequent. She became affected with deafness at the age of 24, which has continued ever since; and she is also subject to pains in her teeth. At the age of 30, she began to have dull pains in the joints of the feet, with hard indolent swellings resembling nodosities. The same, in some degree, in one of her hands. From 1818 till the beginning of 1823, Madame G—— had often felt darting pains in the hands and feet, which did not, however, prevent her from going about her usual occupations. In the month of May 1823, she was seized, some days after suppression of the menses, with intense hemicrania, accompanied by heat of skin and fever, and for which leeches, aperients, antispasmodics and sinapisms were used. Next day there was some mitigation of the hemicrania, while the feet swelled, became red, and painful. In a few days, both the hemicrania and the affection of the feet went off entirely. In August of the same year, she had a repetition of the hemicrania—and

* Revue Medicale, Juin, 1824.

since that period two other accessions, all which were cured in four or five days by the means above-mentioned. About 14 years ago, our patient, after some mental vexation, became affected with a dry cough, which was suddenly followed with complete extinction of voice, there being no pain, nor inflammation of the larynx. All sorts of remedies were tried in vain for the removal of this complaint. At length she remembered that her mother was cured of a similar affection by swallowing an ice. Madame G. had recourse to the same remedy, and with the same success as her mother. Since that period, she has usually lost her voice three or four times a year (generally after some chagrin) and always recovers it by swallowing ices. In the month of May 1824, when the report closes, this lady was in the enjoyment of perfect health.

M. Bayle makes several reflections on the above case, which we need not introduce here. On a superficial view of the case, it will appear to many to present a succession of purely nervous affections unconnected with each other; but, on mature consideration, we are disposed to think, with our author, that they all, or most of them, had a connecting link, and that link gout.

Case 2. J. B. A——, 33 years of age, of nervous temperament, had been ricketty in his infancy, but by the time he arrived at the age of puberty he enjoyed good health. He was even robust, and fresh-coloured. A deformity in the chest, however, still continued, the right side being much more prominent than the left. His mother had been delicate and nervous—his father gouty—his sister has been deaf for many years, and subject to convulsions, whenever she experiences any mental agitation.

Mr. A. had scarcely attained puberty when he gave himself up to venereal excesses—and so early as the age of 20, he experienced dull and uncomfortable pains in the joints of his feet, accompanied by slight swellings of the same. These went off in about a fortnight, and now commenced a profuse discharge of perspirations from the feet, especially during the night. From this time till the age of 30, he rarely passed a year without a fit of sickness of some kind. He had occasionally also pains and redness in the joints of the feet: and in the years that these occurred, he was in much better health than when he missed the visitations of gout. In the latter intervals, he was subject to numerous and strange affections —sometimes to the most alarming faintings—sometimes to apoplectiform seizures, during which he lost sense and motion, the pulse and respiration remaining free—at others, to such painful fits of cardialgia as caused him to cry out—ending in vomitings of porraceous matter which often lasted 24 hours without interruption, followed by a quick restoration to health. Finally, his illness sometimes assumed the form of copious and painless diarrhœa, lasting ten, fifteen, and even thirty days. During each and every of these attacks the urine and perspiration were very fetid.

In his 31st year, being the year 1821, Mr. A. enjoyed good health, with the exception of a sense of weight in his head, some

dyspepsy, and a disposition to sleep after dinner. In May of the same year, he had demonstrations of gout in the feet for several days. On the 7th of the following month (June) he suddenly became senseless, his face being pale, pulse scarcely perceptible, extremities cold. He was bled, and sinapisms were applied to the knees.* He soon recovered from this state, and for some days afterwards he had copious vomitings of many coloured liquids, with quick pulse, heat of skin, head-ache, and alarming attacks of syncope. In about two months he was restored to his usual state of health. In the autumn of the same year, he made a journey into the country, during cold weather, and was seized, some days, afterwards, with acute pains in the epigastrium, and greenish vomittings, which lasted eight days. After this he was troubled with great noise in his ears, which augmented a deafness to which he had been for some time subject. In the spring of 1822, he had wandering and lancinating pains in his feet, followed by dry cough, and in a few days, hæmorrhage from the lungs of about six ounces in quantity, with pyrexia. *Blood-letting, leeches, sinapisms to the lower extremities.* In eight days he recovered from this attack. Between this period and August 1823, he had two slight attacks of gout in the feet. In the beginning of September, during cold weather, he was seized with dry cough, which continued till the middle of October, when he one night brought up ten ounces of blood which quickly coagulated in the basin. Immediately after this he felt himself quite well. Two days afterwards, a fresh attack of hæmoptysis, with dry cough and pyrexia. He was bled to eight ounces, which produced syncope of five minutes duration, and great alarm lest he should not revive. On recovering, he was better, but the cough continued throughout the month of November, in unconquerable paroxysms, and with acute pain in the region of the diaphragm. His breathing was now habitually tight—he had irregular accessions of fever, especially in the evenings—sometimes anorexia, sometimes appetite with painful digestion, nausea, and cardialgia when he indulged in food. These symptoms continued, with exacerbations and remissions, till the end of the month. The remissions were accompanied or preceded by depositions in the urine, or fetid perspirations of the feet. Towards the end of November, he expectorated yellow and thick sputa tinged with blood—he was affected with dyspnœa—irregular diarrhœa, progressive emaciation, acute pain under the three false ribs of the *left side*, with swelling and redness of the skin in that quarter, the other symptoms before enumerated continuing the same. Towards the end of December, there occurred two or three accessions of most alarming syncope. Early in January, though reduced almost to a skeleton, he had an attack of gout in the feet, which were red, swelled, and extremely painful. During this accession the dyspnœa disappeared, but the other symptoms continued. On the 11th January death put a period to his sufferings.

* This was surely bad practice—we mean the bleeding, under such circumstances. That he did not die under the operation of blood-letting, was a godsend of good luck to the practitioner. *Rev.*

The same remark which was made on the first case, is applicable to this—namely, that, however various and apparently dissimilar this unhappy man's ailments, they were all referrible to a gouty diathesis. Every man in practice, who keeps an attentive eye on the phenomena of diseases, will see examples more or less nearly approaching to those which we have stated. The elder Parry has related many cases bearing great analogy to these, in his admirable, but unfinished "Elements of Pathology."

Case 3. M. A. 46 years of age, a Comptroller of the Customs, of full habit and sanguine temperament, contracted debts during a protracted intermittent fever, which he was not afterwards able to discharge. Other misfortunes followed, which produced a melancholy state of mind. He was sober, active, and temperate in his food. In the month of January he had an attack of gout, which confined him a fortnight to the house. Greatly embarrassed with debts, and labouring under much anxiety of mind, he came to Paris, on the 29th December, 1820. His nights were now passed without sleep, and in a state of agitation, experiencing, at the same time, inexpressible pain in the head, and violent palpitation of the heart. Every thing presented itself to his imagination in the most gloomy colours. These symptoms increasing, he was, on the 2d Jan. in a state of actual derangement. Seized also with the desire of suicide, he distributed what little money he had to those who were nearest to him, and hastened out of Paris, without knowing whither he went, carrying with him a knife, with which he inflicted several wounds on himself, but none of them mortal, the knife being very blunt. He next resolved to drown himself; and arriving at the Pont de Neuilly, he was on the point of percipitating himself into the river, when he was prevented by a female, who catching hold of him, exclaimed, "*what will become of your soul?*" He went into a Cabaret, where he passed the night. Next morning he attempted to hang himself, and nearly succeeded. On recovering from a state of insensibility into which he was thrown, he found himself quite bereft of sight; but this gradually returned, together with a glimmering of reason, which induced him to resist the desire of suicide. But this he could not long do. On returning to Charenton, he endeavoured to drown himself in the Marne, but was prevented by the thickness of the ice. Here he was secured and conducted to the Royal Asylum at Charenton, as a maniac. On examination, he was found in a high state of maniacal excitement, and was twice bled with benefit. Nevertheless, his face continued red, his pulse full and hard, his heart violently palpitating, and his mind in a state of profound melancholy. He remained at Charenton in a state of mental derangement, with much excitement, till the 7th January, when a fit of gout attacked both feet, and presently he was in a state of sound mind. He could not, however, perfectly recollect all that had passed during his phrenzied condition. The gout ran a regular and pretty severe course, and the mental alienation returned no more.

The reader must here determine in his own mind whether the gout or the moral afflictions were the cause of the mental aliena-

tion. For our own parts, we think the melancholy moral emotions prevented the regular course of gout to the extremities, and threw it on the sensorium, with the consequent tendency to suicide and insanity. This idea is strengthened by the evident fact, that a regular attack of gout in the feet instantaneously dissipated the maniacal hallucination.

We shall introduce one more case, and then bring this paper to a conclusion.

Case 4. Madame Eliz. D.———, 40 years of age, of nervous temperament, had had, at different times, several attacks of regular gout in the feet, and sometimes in the upper extremities. Occasionally, however, it took an anomalous form, and attacked the stomach with violent pains, vomitings, and severe colick, which did not cease till gout came to the extremities. Some pecuniary losses now occasioned a slight and temporary derangement of mind. Afterwards the assassination of her husband deprived her completely of reason for a time, which alienation has since returned often. In 1812, she threw herself into the water, and nearly drowned herself. She was then confined at Rouen, each time that the maniacal hallucination returned. She was set at liberty in the intervals. Two years ago, she became affected with violent cephalalgia, accompanied by frequent and painful vomitings, especially after taking any aliment. An accession of mania dissipated all these symptoms. Soon after the menses became suppressed, followed by menorrhagia and frequent syncopes. One year ago, an accession of mania was preceded by most severe gastric affections, faintness, and hypothymia.

On the 28th August, 1821, she entered the Asylum at Charenton, presenting the following symptoms, viz:—redness of the tongue, vomitings, somnolency, faintings, cephalalgia. These symptoms ceased, and an accession of mania came on, with constant agitation, running about, crying, singing, loquacity, and great inclination to mischief. The features were altered, the face pale, with the appearance of some abdominal affection. In two or three weeks these symptoms diminished, and she had frequent alternations of tranquillity and agitation. By the month of February 1822, reason was completely restored. At this time, the tongue became red, with epigastralgia, vomitings, cephalalgia.—The vomitings continued some time, but the pains in the head and stomach went off soon. Towards the end of April, the gastric symptoms returned, with anorexia, pasty mouth, great tenderness at the pit of the stomach, with frequent bilious vomitings, provoked by the smallest quantity of aliment. It was only now that the physicians became acquainted with the patient's true history, and learnt that she had been subject to gout. Large sinapisms were therefore applied to the feet and the legs. Next day there was considerable amelioration of the symptoms, one of the feet being red and inflamed with gout. The day following, all the symptoms except those of gout had vanished. After this period, however, there were several alternations of gout and mania, the one never being present at the same time with the other.

From these and other cases detailed in the work before us, M. Bayle has come to the following conclusions:—

1*mo.* That the *nature* of gout is as yet unknown, and consequently that none of the theories broached in explanation of this disease, are at all satisfactory. It is neither a pure inflammation, nor an organic lesion, but apparently the result of a morbid change in some of the humours that circulate through the animal economy.

2*ndo.* That gout is capable of affecting any or all of the organs and tissues in the human frame, although it appears to have a greater predilection for some than for others.

3*tio.* That the symptoms by which gout is manifested, are those of inflammation—of the neuroses—of the hæmorrhagiæ—exhibiting the gratest variety of phenomena, which may exist separately—successively—or alternately, according to the intensity of the malady, its regularity or irregularity, the strength of predisposition, and various other circumstances by which the patient is surrounded. Hence the diagnosis of gout, in its anomalous forms, is often extremely difficult.

4*to.* That, notwithstanding the boasted assertions which are every day made, there exists no specific remedy for gout. At the same time it must be acknowledged that there are many medicines which are very useful in combating particular symptoms and forms of the disease, though there is none that strikes at the root of the evil—the vitiation of the fluids, its probable cause. There is but one indication which is universally applicable to gout—and that is, to cause a revulsion to the extremities by all possible means, whenever it affects an internal organ or tissue.

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16. *Acute Cerebral Affections.** George ——, ætat. 17, a servant, of a lymphatico-sanguineous temperament, was attacked in the autumn of 1823, with a fever, which presented different types, and ceased and reappeared several times. Towards the middle of December, he complained only of pains in his legs, with, at times, paroxysms of fever, not however such as to confine him to bed. His parents, with whom he was, applied a blister to the inferior-anterior part of the fore-arm, in the direction of the cubito-radial muscle, with temporary advantage to the patient. But on the 10th and 11th of January, 1824, the fever returned, without any alarming symptoms. On the morning of the 12th, when he arose, his understanding seemed much disturbed; he breakfasted and dined heartily, but still his ideas and conversation were incoherent and confused. About eight o'clock, p. m. being seated at the fire, with his father and mother, he suddenly grew weak and fell senseless to the ground: he was carried to bed speechless, and M. Vial being called in, found him in the following condition. He lay supine; the eye-lids wide open discovered the pupil much dilated, and the conjunctiva slightly injected and reddened: no impression on the retina from a lighted candle:

* Gazette de Santé. No. xxiv. Aout, 1824.

body insensible to pinching; the arms and legs contracted and half bent: the upper and lower jaw, contracted also, with difficulty admitted some spoonfuls of liquid: hearing apparently quite gone, and his parents said, that since the accident (about four hours previous) he had not uttered a single word: sense of smell unaffected by the odours of ether and liquid ammonia; respiration was pretty natural, and the pulse somewhat quick, but regular. As he had eaten pretty heartily, three grains of emetic tartar, in four spoonfuls of lukewarm water, were given, but with no effect. Two blisters were then applied to the legs and sinapisms to the soles of the feet, the latter to be renewed to the knees, four hours afterwards; eight leeches were ordered to the temples, but five only were employed, which produced very little bleeding.—Diluents were given, and an ethereal draught taken every hour. On the 13th, the patient was much the same; during the night and morning he had, at intervals, cried faintly; the urine was passed involuntarily. (Drinks as before, and two lavements, with an ounce of sulphate of soda in each.)

The patient continued thus till the 16th, when he recovered his speech, but was delirious in his replies: the retina had become sensible to light: he had at times frightful dreams, at other moments he was quite tranquil. hearing again natural; the contraction of the limbs and jaws had ceased: the tongue was slightly red at the tip, and furred in the middle: the urine deposited, on cooling, a lateritious sediment, and was no longer passed unconsciously: there had been two stools in the twenty-four hours; the skin was a little moist. As the young man complained of his head, three leeches were put on each temple, and sinapisms on the inside of each thigh.

On the 17th, the sixth day of his illness, the delirium had greatly abated since the application of the leeches, the bites of which had bled freely. He continued to improve rapidly from this day, and on the 20th he was very well, and soon able to resume his ordinary occupations.

M. Vial, the author of the above statement, considers the case as one of inflammation of the cerebral substance—*encephalitis*.—But Dr. Martinet, who was ordered to report on the case, by the Athénée de Medecine, justly looks upon it as an affection of the membranes only. A disease of the encephalon itself continuing so many days, with little amelioration, would, in all probability, have produced such organic lesion in the soft cerebral mass as would have ended in death, or induced a train of symptoms that would not have been speedily removed. It is therefore, we think with M. Martinet, to be placed in the class of *meningeal*, rather than *cerebral* inflammations.

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17. *Tetanus.* Mr. Carmichael has published six cases of tetanus in the fourth volume of the Dublin Transactions, with the results. Of these, only one case terminated favourably. This was a man, 24 years of age, admitted into hospital on the 3d of August 1822, with pain and stiffness of jaws, difficulty of swallowing, risus sardonicus, pain at the pit of the stomach, confined bowels, pulse 90,

and strong. The patient had received a contusion on the right shin three weeks previously. The tetanic symptoms commenced four days before he came into the hospital. Twenty ounces of blood were taken from the arm, and a draught of castor oil, oil of turpentine, and laudanum. 4th. Had a tolerably easy night. Was ordered mercurial ointment, to be rubbed on the thighs every four hours, and tartar emetic ointment to the spine every night—vapour bath—forty drops of laudanum every three hours. 6th. No alteration. 7th. Mouth sore—back covered with pustules—tetanic symptoms not increased. 9th. Severe pain at the pit of the stomach—castor oil draughts repeated, and operated. 10th. The spasms were frequent. He expressed a great desire for punch, of which he was allowed a moderate quantity. As the symptoms continued favourable, he was indulged with more of this beverage. 16th. All medicine was discontinued, and shortly afterwards he was discharged well.

It is evident that this was a mild case; but, whether the recovery can be attributed to medicine or nature is very problematical.

Of the five cases that died, only two were permitted to be opened. In these, the spinal marrow and its sheath were examined, but no morbid appearances could be detected. In one of them, numerous contractions were observed in the ileum. After commenting on the bad success of the means hitherto employed in tetanus, Mr. Carmichael suggests (for he cannot rest on the basis of experience) the following:—

"From the general failure of the plans hitherto employed, I shall feel no hesitation (however hypothetical these views may appear to some) in giving a full trial in such cases of Tetanus as may next happen to come under my care, to alcohol in any of its various combinations—ether largely exhibited both in the form of draught and enema, and combined with opium—the tartar emetic ointment rubbed upon the abdomen, and at the same time promoting the action of the bowels by castor oil and turpentine."—292.

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18. *Purpura Hæmorrhagica.** James Stodart, æt. 6, living in a confined part of the town, of a weak and strumous constitution, though lively, had been much confined to school, and had a swelling of the glands of the neck with inflamed eyes. On the 24th, and two following days of April 1823, he appeared very dull, inclined to sit over the fire, with thirst and face flushed. On the 27th, spots, like flea-bites, some small and red, others larger and purple, appeared over a great part of his skin, and soon increased considerably. On the 28th, blood oozed from the mouth, with occasional bloody sputa. In the morning, the urine was red and turbid, and in the forenoon he walked a mile and a half, with his father, for medical aid. On the 1st of May, Dr. Gairdner first saw

* Case of Purpura Hæmorrhagica. By Ebenezer Gairdner, M.D. Fellow of the Royal College of Physicians, Edinburgh; and one of the Physicians to the Royal Dispensary.—*Ed. Med. Chir. Transactions, vol.* i. *p.* 671, *et seq.*

the patient, and, from the symptoms, recognised immediately the purpura hæmorrhagica of Willan. The petechiæ, with vibices and ecchymoses, were numerous over the whole body, but crowded on the upper part of the back, breast, and anterior part of both thighs; some of the latter, about the size of a sixpence, of irregular shapes, were of a claret colour; some felt rough though not at all elevated. By careful examination through a powerful glass, the texture of the skin appeared quite entire. The conjunctiva of the right eye was ecchymosed, without œdema or lippitudo; there was neither diminution of sight, nor pain; tongue rather dry and strewed with several petechiæ; thirst; gums redder than usual, tender, and blood oozed from them; his breath fœtid; hæmatemesis occasionally present; the Schneiderian membrane was streaked with blood, and at times it bled. Both hypochondria, particularly the left, were full and painful on pressure; abdomen rather tumid, with obsure pain; bowels costive; the urine, of a deep red, and turbid, was free, and often passed in sleep; skin nearly as usual; he seemed little oppressed, but attentive to questions.

A saline cathartic, and fifteen drops of the diluted sulphuric acid to be taken thrice a day: the warm bath, of about 80° Fahrenheit, evening and morning. *May 2nd.* Some sleep was obtained, though he had a bad night; breathing oppressed and quiet; hæmorrhagic symptoms increased; pulse 110 and wiry. He was bled, and when he had lost about ℥x. he vomited; no blood in the egesta, but he had spit clots in the night; pulse 124; skin hot; besides the bath and sulphuric acid, powders, containing calomel and jalap, three grains each, were ordered every three hours. On the 3d, the wound was not yet closed; blood had oozed from it since the operation; some vibices enlarged. All the symptoms were mitigated. On the 4th, the pulse 124; pain under the os frontis; ecchymosis of the eye greater; hypochondria more painful with tension. Bleeding was again determined on, but, on removing the bandage, blood drained out, and the patient becoming faint with terror at the lancet, two or three ounces only were obtained. He sank into a sound slumber soon afterwards; pulse 124. 5th. Urine pale and limpid; pulse 102; evacuations from the bowels black and offensive. The pain in the abdomen and hypochondria increased considerably, and castor oil was administered in small doses, with fomentations. Nature appearing inadequate to the removal of the disease, port wine and water, a pound of each, with an ounce of cinchona infused into it, was frequently given. 6th. The pain in the bowels began to decrease, black fæces were still discharged, no oozing or spitting of blood, tongue natural, and the petechiæ appeared a little faded; pulse 98. He continued to improve daily till the 10th, when he was convalescent; the marks on the skin very pale, but the breath was fœtid. On the 14th he was quite well.

The blood could not be analysed, as it was thrown away, but what was first drawn seemed, in four hours, to coagulate imperfectly into one mass. On the following day, it resembled a tremulous jelly, the top of a greenish buff colour, interspersed with brownish spots. What was discharged afterwards was more like

turbid lymph, or a fluid in which some reddish colouring matter was in suspension. The cloths were stained, as with dirty water, with spots of a reddish brown hue. It is remarkable that the serum, by rest, undergoes a spontaneous, though slow coagulation.

"*Mr. Murray's Analysis of the Urine.*

"No. I. voided on the 2d May, at half past 2 o'clock P. M. was of a brown colour, without smell. On standing, it deposited a precipitate of a dark colour, while the superior part of the fluid was of a dirty pale yellow colour, and turbid. When the urine was shaken, it resumed the original brown appearance; and a portion of it that was set aside, after eighteen hours standing, was still without smell.

"Exper. 1. Litmus paper was stained slightly red.—2. A dense white coagulum was produced by a heat of 180°.—3. Diluted nitric acid and alcohol produced a similar coagulum—4 Corrosive muriate of mercury caused an abundant white precipitate—5. Lime-water produced a very slight precipitate.—6. Potash did not cause any precipitate.—7. One fluid drachm contained $2\frac{1}{2}$ grains of solid matter; the urine contained $\frac{1}{24}$th part of solid contents.—8. A slight precipitate was produced in the clear liquid by the corrosive muriate and infusion of gall.—9. The clear liquid contained a considerable portion of a colouring matter, and but a small quantity of phosphoric salts, with no urea.

"Nos. II. and III. voided at 5 and half past 5 o'clock P. M. of 2d May, differed principally from No. I. in containing more free acid and less albuminous matter, the urine containing only $\frac{1}{27}$th part of solid contents.

"In the 8th experiment, the precipitate was rather more copious, indicating the presence of gelatine and mucus.

"In the 9th experiment also, the appearances were rather more distinct.

"Dr. Combe has shown, in his case of Purpura,* that there was an excess of albumen, with a deficiency of urea, similar somewhat, in this respect, to the present case." 680.

Mr. Wood's Case.

The patient, æt. 12, was scrofulous, having a chronic disease in her left wrist. June 21, a spot appeared on her under lip, like the mark from a pen, and the next morning, similar ones were seen studded over her legs and arms. She walked to Mr. Wood's house (about a mile's distance) with ease. Some opening medicine was ordered. Mr. W. found her next day sitting by the fire, her pulse good, and unconscious of ailment. Salts were given. At 10 at night, she had some milk and bread, and soon afterwards went to the water-closet, and again betwixt 3 and 4 A. M. when she was extremely faint and giddy. There was severe pain in the

"* Edin. Med. Journ. No. 66."

right temple, and distressing sickness supervened. What she vomited was tinged with blood, and her gums now bled readily.—Most alarming languor and exhaustion succeeded; the tendency to vomit continued; the pulse was scarcely perceptible; symptoms of oppressed brain manifested themselves, and, at 3 P. M. she died comatose.

Dissection. Surface as before described. The pericranium and dura mater were covered with petechial spots. On removing the membrane, the effects of large effusion of blood were evident. In the right templar region, a firm coagulum, floating in bloody serum, had forced its way through the broken-down brain into the ventricle. The serous membranes of the chest and abdomen were studded throughout with dark livid spots.

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19. *Conversion of Disease.** The conversion of disease forms one of the most curious and perplexing problems in pathology. Dr. Crampton thinks that the fact of metastasis is now much doubted. It is so by a few young writers who can descant most learnedly, and pronounce dogmatically, on diseases and phenomena they never saw. But every man of even moderate experience and common attention, must be as well convinced of the occurrence of metastasis, conversion, transference, or whatever other name may be assigned to it, as of his own existence. That this curious process is an effort of nature or of the constitution, there can be little doubt. But it is not, therefore, a salutary process in all cases. Indeed the same remark may be applied to all Dame Nature's workings. They are often salutary—often fatal. There can be little doubt, however, that metastasis is a process which is, as it were, forced upon the constitution occasionally by the operation of rough or improper remedies. We agree, therefore, in the following sentiment of Dr. Crampton.

"Whatever difficulties may occur in attempting to explain these transitions, there is no doubt of the fact, that disease often becomes suspended in one part, and appears in another. Under judicious medical treatment, such occurrences are not very common; experienced physicians are prepared for them, and, in many instances, anticipate them; they are frequently averse to push medicines to their full extent of remedial power, lest they may hazard such consequences; but where such conversions of disease are looked for, a cautious and more expectant treatment is oftener adopted." 70.

In the case about to be detailed, rheumatism was exchanged in succession for erysipelas, dysentery, peritoneal inflammation, and dropsy. In each successive change the preceding disease disappeared, and ultimately the patient was restored to health, after encountering considerable difficulties, as might be expected.

* Dr. John Crampton. Dublin Transactions, vol. iv.

Case. M. R. aged 26, slender, and of fair complexion, after returning from harvest-work, in England, was admitted into Steevens' Hospital on the 2d October 1820, complaining of pains in his wrists, elbows, shoulders, knees, and ankles. The knees were swelled and gave him most uneasiness. He had slight cough—pulse natural—no fever—skin dry Attention was paid to the skin and digestive organs—and tepid baths were occasionally employed. Under this treatment the rheumatic affection subsided, excepting the swelling and pain in the knees. Leeches and fomentations were repeated three or four times, with an interval of a few days between each application. After three weeks residence in hospital, the tartar emetic ointment was applied to the knees ; but nothing appeared to make any impression on the local complaint. A blister was now applied to one of the knees. The pain deserted both knees. But presently the glands in the left axilla became enormously swelled and extremely painful—the surrounding cellular texture and skin inflamed ; this appearance extending down the arm, the whole of which looked angry and erysipelatous, attended with symptomatic fever, delirium, rapid, small, and weak pulse—the powers of life appearing at a low ebb.

" Efforts were made to subdue the local inflammation by leeches successively applied, from the 3d of December to the 10th, by cooling lotions and emollient poultices, by a strictly antiphlogistic regimen, with refrigerants, occasional opiates, and the necessary attention to the state of the bowels ; but deep and extensive suppuration took place under the axilla, which exhausted the patient, and gave every reason to apprehend a hectic state. Wine, cordials, and a suitable diet, with appropriate surgical treatment, had, however, so far restored him, as to give reasonable hopes of recovery ; but on the 17th of December disease again assailed him in a new and not less dangerous form." 73.

This form, or third attack, consisted in a painful state of the whole tract of intestines, attended with frequent liquid and bloody stools, indicating inflammation of the mucous membrane of the bowels.

Under existing circumstances, very active treatment could not be ventured on. Leeches to the abdomen and anus—castor oil—anodyne absorbent mixtures, were employed The pain was mitigated, but the diarrhœa continued, notwithstanding a variety of remedies. At length, it was determined to exhibit a grain of the superacetate of lead and half a grain of opium three times a day. The remedy was so far successful, that the disease soon assumed its fourth and last form.

" Ascites, with a painful and very distended abdomen was discernible, and little strength was now left upon which remedies of any considerable power could be brought to act. The peritoneum, at this period, was evidently inflamed, and effusion into its cavity was taking place as a consequence." 74.

Digitalis, blisters, leeches, and other appropriate means subdued at length the peritoneal inflammation and dropsical effusion.

"This case," says Dr. Crampton, "may be considered as an instance of that peculiar delicacy of constitution we often meet with in practice, where several organs are successively attacked with disease. Whether a scrofulous diathesis or other predisposition lays the foundation for such occurrences, it is not easy to say; but in the physician's intercourse with patients in the higher circles of society, often amongst females, when one disorder is nearly subdued, some new morbid train of symptoms arises I recollect a case in an interesting female, where a smart pulmonic attack first claimed attention; on the subsidence of this, an hepatic inflammatory disease ensued; in succession, a nephritic one. When relieved in one quarter, the same morbid circle of disease was renewed, so that it was nearly impossible to restore her to health. With such a description of patient, moral causes have also their influence, and must be taken into account by the physician." 76.

Was the first metastasis, or transference of inflammation from the knees to the axillary glands and cellular membrane, occasioned or *accelerated* by the blister? We think the *latter* very probable, and so does Dr. Crampton. In the following passage, we almost entirely agree with our ingenious author, and we recommend the passage to the attention of the reader.

"The last change, as to the parts affected by disease, is more readily understood. The transition was merely from the mucous to the serous coats of the intestines and the peritoneum. That the superacetate of lead was, in some degree, instrumental in effecting this conversion, there is, I believe, little doubt; but it was a change on the whole which improved the patient's chance of recovery. A remedy possessing so high a degree of astringency soon arrested the profuse discharges from the inner coats; the outer, or serous coats, then became the seat of irritation. The peritoneal inflammation, although occurring in a debilitated subject, no time being lost, gave way, partly to the treatment adopted, and partly to its natural cure by effusion of serum into the abdominal cavity or dropsy. Finally, the dropsical effusion was disposed of, by using remedies to subdue inflammation, to promote absorption, and to diminish exhalation." 78.

We said we *almost* entirely agreed with our author in the above passage. We cannot quite coincide in his idea that *peritoneal* inflammation and effusion into the abdominal cavity was a condition preferable to inflammatory affection of the *mucous membrane* of the bowels and consequent diarrhœa. We certainly should prefer the latter condition, were it in our choice, whether to treat it in others, or suffer it ourselves.

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20. *Effects of Lightning.** On the 16th of April 1812, the Coldstream East-Indiaman, being near the line, was struck by lightning twice, at an interval of about 15 seconds. The effect upon the vessel was dreadful. Marks of fusion appeared in a brass pulley

* Cases of Persons struck by Lightning. By Alex. Macaulay, M.D.—*Ed. Med. Chir. Transactions, vol. i. p. 360, et seq.*

at the top of the mainmast, which was struck spirally and greatly shattered;—a lascar, who was standing at the foot it, was killed upon the spot. Another lascar was rendered insensible, but recovered in a quarter of an hour. Three cases of severe injury occurred.

Case 1. George Brown, gunner's mate, was picked up in a state of complete apoplexy: his countenance livid and bloated, his body covered with a cold, clammy sweat: breathing anxious and stertorous: pulse slow, strong, and full; and sense and volition suspended. Fifty ounces of blood were taken in full stream, which removed the stupor and other alarming symptoms. This was followed by purging and antiphlogistic regimen. In about three days, there was much pain in the region of the liver, which was dissipated by the application of a blister. He gradually recovered.

Case 2. Samuel Cramp, seaman, in the main-top when the ship was struck, was able to come down to his birth, but was soon attacked with very violent epileptic fits. These were always preceded by his imagining that he saw coming towards him a spectre-sailor, (respecting whom a story had got about.) Bleeding was largely employed. The febrile symptoms continued for several days, and, on the fourth, he appeared suddenly to have lost his voice, which, however, he recovered in two days. He said that speaking gave him acute pain in the right side. He recovered, but, when intoxicated, he was ever after louder and more turbulent than before the accident.

Case 3. A soldier, in the St. Helena regiment, was struck. He too had epilepsy, which was stopped by depletion; the fits continued to recur for several weeks afterwards. He was subject to epilepsy, but had not been attacked during the voyage, previous to the thunder-storm.

All the cases, the author remarks, showed evident marks of determination to the head. It is extremely probable that the two last patients were influenced more by the passion of fear, than by the lightning. Dr. Gregory used to give as an instance of what Cullen calls apoplexia mentalis, the case of an elderly lady, who was much terrified by very vivid lightning, complained of headach, which went on to apoplexy, and proved fatal in thirty-six hours. The pain in the region of the liver, noticed in two cases, is remarkable.

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21. *Inflammation of the Appendix Cœci.** There are some cases of this kind on record before M. Vilermay's. This gentleman has recently published two instances.

The *first* was a man of sober habits and good general health, who was suddenly attacked, on the 18th November 1823, with

* M. Vilermay. Archives Generales.

acute pain in the right side of the abdomen, followed by vomiting. The testicle of this side was retracted—pulse little altered. Emollients and 20 leeches to the anus. Better in the evening; but the night was restless, and the pulse was quickened. *Second day*, 30 leeches to the right aliac region, the seat of pain. Sixteen ounces of blood were also taken from the arm. *3d. day*, 20 leeches to the seat of pain—warm bath every six hours—vomiting in the night of dark green and blackish matters. *4th day*, pulse gone, extremities cold. Expired at mid-day.

Dissection. In the right iliac fossa there were five ounces of black serum effused, emitting a gangrenous smell. In the midst of this floated the appendix vermiformis gangrened. The gangrene did not extend to the neighbouring parts. The cellular tissue surrounding the right kidney was infiltrated with a seropurulent liquid, the gland itself being free from disease. The mucous membrane of the stomach was red and thickened.

Case 2d. A man had an inguinal hernia of the right side, which he kept accurately reduced, by means of a truss. After supper (21st July) he was seized with desire to vomit, and a violent pain near the umbilicus, with a sensation of a bar crossing him there. He brought up some green viscid bile—the pain and tension increased. 22d. At six this morning there was a calm, but attended with extreme debility, pallor of the countenance, thirst, small irregular pulse, cramps in the calves of the legs. Venesection—leeches—fomentations ordered, but not complied with. At 2 P. M. green vomiting, dysuria, great tumefaction of the abdomen, rigors. Subdelirium in the night. 23d. Died at 10 o'clock this morning.

Dissection. The appendix vermiformis was observed to be three inches long, and an inch in diameter at its base, of a bluish-black colour. When opened from its external side, the cæcum was found to be healthy even as far as the mouth of the appendix. The intestines were healthy, but the mucous membrane of the stomach was inflamed.

Inflammation of the caput coli itself is by no means an uncommon disease, and is almost invariably occasioned by hardened fœcal matters or indigestible substances lodged there. We have met with many cases of this kind, that caused great constitutional disturbance and some danger of life. After local, and if necessary, general bleeding, we have found a considerable dose of opium combined with a cathartic, and, in a few hours, followed by repeated purgatives, the best means of dislodging the offending matters.

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22. *Partial Intermittent Fever.** Intermittent diseases present the most inexplicable phenomena of any class of human ailments. They are the rock on which systems split—while they are the glory of *practical medicine*. *Les fièvres intermittentes sont devenues l'écueil des systèmes—elles sont la gloire de la médécine d'observa-*

* Fh. Des-alleurs. Revue Med. Mai, 1824.

tion. Observation would seem to prove that, whereas a regular intermittent effects, during its paroxysms, the whole system, there are numerous other forms of the same disease which fix their seat in a particular part, or point, as it were of the body, leaving all other organs and parts free. The following is a curious example.

A woman, aged 45 years, who officiated as a nurse, and was of a nervous temperament, complained to our author of an affection of the right arm, to which she had been subject for more than a year. It began with a sense of numbness and tremor of the extremity, which sometimes lasted two hours or more, then a sense of heat occurred—and finally a perspiration broke out over the arm, the whole paroxysm lasting some hours, and leaving the patient in a languid condition for a few hours more, after which she felt quite well, till another paroxysm took place. The intervals, at first, were three or four days, but latterly they have returned at shorter periods. She had tried a multitude of remedies, without receiving the least benefit. Our author first gave emetics, followed by bitter and antispasmodic drugs, but to no purpose. The appetite was somewhat improved, but the local affection remained. He now requested to be present during one of the attacks, and found as follows; the patient was sitting, her countenance somewhat depressed, but, otherwise, apparently in her ordinary condition. Her right arm, though well covered and near the fire, felt to herself as cold as ice.—Its temperature was not much decreased to the tact of others, except the hand. A tremor of the limb now came on, and was pretty violent. The pulse was nearly natural. In half an hour the arm became red, and the sensation of cold went off, changing to that of intense heat, though still but little altered in real temperature, till a quarter of an hour had elapsed, when the heat was very sensible to the touch of the by-stander. In half an hour more the whole extremity was covered with perspiration—the patient's spirits rose, and in the course of another hour the paroxysm was over. At the close of the attack the patient passed a pint of high coloured-urine, cloudy, but not sedimentous.

Our author now became convinced that the disease was a local or partial intermittent, and determined to treat it accordingly. The bark was therefore administered. It first had the effect of mitigating, and ultimately, of entirely stopping the paroxysms. The patient has since continued in good health.

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23. *Animal Putrefaction capable of producing Fever resembling Plague.** We had lately an opportunity of showing how erroneous was the dogma of Dr. Bancroft and his partisans that the fevers of hot climates (yellow fever so denominated) never became contagious in their progress. Another dogma which he has maintained with more forensic argument than matter-of-fact evidence, is

* Private but authenticated information.—*Editor.*

that *animal matters*, in a state of putrefaction, never produced fever. The following authentic fact will not tend much to the stability of the learned Doctor's theory.

An American merchant ship was lying at anchor in Wampoa Roads, 16 miles from Canton. One of her crew died of dysentery. He was taken on shore to be buried. No disease of any kind had occurred in the ship from her leaving America, till her arrival in the river Tigris. Four men accompanied the corpse, and two of them began to dig a grave. Unfortunately they lit upon a spot where a human body had been buried about two or three months previously (as was afterwards ascertained.) The instant the spade went through the lid of the coffin, a most dreadful effluvium issued forth, and the two men fell down nearly lifeless. It was with the greatest difficulty their companions could approach near enough to drag them from the spot, and fill up the place with earth. The two men now recovered a little, and with assistance reached the boat and returned on board. On the succeeding morning they were visited by an assistant-surgeon from an English Indiaman in the roads, who reported the following symptoms: viz. very acute head-ache, with a sense of giddiness, and dimness of sight (which had existed more or less from the moment of opening the grave) eyes of a peculiar muddy appearance, "resembling that generally observed in cases of Indian cholera"—oppression about the præcordia—dull heavy pain in the regions of the heart and liver, with slight palpitation at times, and fluttering pulse—sense of extreme debility, with occasional convulsive or spasmodic twitchings of the muscles of the lower extremities—nausea—slight diarrhœa—rigors succeeded by flushings of the face, neck, breast, and upper extremities—tongue white and much loaded—pulse from 110 to 120, weak and irregular—urine scanty and high-coloured—skin sometimes dry, sometimes covered with a clammy sweat. On the fourth day from the commencement of the attack, numerous petechiæ appeared over the breast and arms—and in one of the patients, a large bubo formed in the right groin, and another in the axilla of the same side, which speedily ran on to suppuration. To one, the disease proved fatal on the evening of the fourth day—to the other, on the morning of the fifth. For two days previously to death, the gums bled freely.—The symptoms were so completely similar in both cases, that it is needless to repeat them here. Purgatives, venesection to fifteen ounces, blisters—and ultimately stimulants, were the means ineffectually had recourse to in these two cases.

Dissection. Mr Hamilton, surgeon of his Britannic Majesty's ship Britomart, was present at the post mortem examination. There are few medical officers in the army or navy better qualified to appreciate the appearances.

In both cases, the vessels of the brain were loaded, and an effusion of lymph existed between the tunica arachnoidea and pia mater—a more than usual quantity of fluid in the ventricles—upwards of three ounces of a dark-coloured liquid at the base of the brain. The optic nerve, on the right side of one of the patients, was surrounded by a portion of gelatinous matter, where it emerges from the thalamus, and appeared thickened and discoloured—surface

of the brain very vascular. The heart, in both cases, was much enlarged, and distended with blood. In one case, five ounces of a dark-coloured fluid flowed from the pericardium when slit open, and the vessels on its internal surface were gorged with blood. The liver was enlarged in both instances, and its vessels completely gorged with blood, and this was indeed the case throughout the who leportal circle. The stomach, near its pyloric orifice, was thickly beset, in one case, with small purple-coloured spots. The intestines in several places assumed a brownish appearance, as likewise the omentum. There were numerous petechiæ on the surfaces of both bodies. In one of the cases, the medulla spinalis, in the dorsal region, to the extent of three or four inches, was of a light brown colour; and in the other case, it exhibited evident marks of congestion throughout. Most of the inguinal and axillary glands were enlarged and hardened, and several of them when cut into, contained a light straw-coloured matter. No other morbid alteration of structure existed.

One of the two, not immediately engaged in digging the grave, was attacked on the eighth day from his being on shore, and Mr. Hamilton was requested to attend with the other medical gentlemen. They found the patient retching violently, and labouring under all the symptoms of the former patients, in an aggravated degree. On examination, it was found that there had existed, for three days previously, pain and enlargement of one of the inguinal glands, which had now acquired the size of a hen's egg. For that space of time he had also felt indisposed, but did not complain or abstain from duty. Notwithstanding the state of the pulse, which was very weak and irregular, Mr. Hamilton immediately bled the patient to the extent of twenty-five ounces, previously placing him in a horizontal posture, with a view of preventing too early syncope. Twenty grains of calomel and one fluid drachm of tincture of opium were administered instanter. This, with some other minor means, had the effect of allaying the gastric irritability. The pulse rather increased in strength during the bleeding;—but soon afterwards became almost imperceptible at the wrists. Stimulants of ether, brandy, &c. were now exhibited—the patient was stripped of his clothes, and a flannel gown, previously moistened on its inner surface with a mixture of brandy and nitric acid, was put on. By means of a portable vapour bath, steam was now applied to the body and continued for half an hour, when so considerable a reaction came on, that Mr. H. thought proper to restrain it by means of another bleeding to the amount of twenty-five ounces. This had the desired effect of relieving a very acute headache, and severe giddiness, as well as a sense of fulness and dull heavy pain in the regions of the heart and liver. Upon removing the flannel gown, the whole surface of the body appeared highly inflamed and tender to the touch, and the petechiæ which had previously been spread over the breast and arms, had now almost wholly disappeared. Being enveloped in a blanket, he was now removed to bed. The liq. ammon. acet. and camphor were given as sudorifics, and calomel and jalap to open the bowels. M. H. visited him in six hours after he was put to bed—and

had the mortification to find him in as bad a state as when first seen. The pulse was very feeble—surface covered with clammy sweat—lower extremities cold. The bath and other means before adopted (with the exception of venesection) were again employed, and reaction was once more excited, together with free perspiration. An alleviation of the symptoms was the consequence. Friction with mercurial ointment and liquor ammoniæ was directed over the abdomen and thighs, while calomel was freely given until the system came under the influence of mercury, gentle purgatives being administered the while. Venesection was a third time necessary to moderate excitement and promote the action of the mercurials. The enlarged gland in the groin did not run on to suppuration, but continued hard and the same size as at first. On the fifth day, this patient was out of danger, being in a state of ptyalism. It was about three weeks before he was able to resume his duty. The fourth man had a slight indisposition; but not of any consequence or decided character. Every precaution was taken to prevent the diffusion of the disease on board the vessel, by cleanliness, ventilation, fumigation, white washing, &c. and no farther sickness occurred.

We think the foregoing document (from official records) will satisfy the most sceptical that putrid *animal* matters, may, under certain circumstances, produce fever, and that of so malignant and fatal a character as to closely resemble plague itself. No little credit is due to Mr. Hamilton and the other medical officers, for the zeal and ability manifested in the dissection of the fatal cases, and treatment of the man who survived.

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24. *Pathology of Epilepsy.** About eight years ago, Dr. Reid's attention was drawn to the subject of epilepsy, when attending the hospitals with the late Dr. E. Percival. Spirit of turpentine was then strongly recommended in epileptic diseases. While studying the phenomena of this formidable disorder, our author felt convinced, that an extensive field for the investigation of its pathology was still open. In epilepsy, it is evident, that a derangement of the moving powers forms its most prominent characteristic feature—and as these moving powers are under the influence of the nervous mass situated in the spinal column, it ought to be ranked, our author conceives, among those diseases to which the spinal system is liable.

Pure epilepsy, Dr. Reid observes, is seldom fatal. In 34 cases which came under his notice, two only died of the disease. On examination of these, *post mortem,* no morbid appearance, sufficient to account for death, could be found till the spinal column was opened. Within the cervical vertebræ the membranes enveloping the medullary mass appeared covered with a "minutely injected vascular tissue."

"The morbid states of other parts, particularly in the head, which have been the immediate cause of death in cases previously subject to Epilepsy, can only be considered the consequences, for

* Dr. Robert Reid. Dublin Transactions, vol. iv. p. 354, *et seq.*

similar states have been met where no such disease attended. It is important to be aware, when investigating the diseases incidental to the spinal system, that they frequently run into each other.—Thus a person while under treatment for Epilepsy may suffer tetanic spasm, then chorea, then catalepsy, &c. : a case of this kind occurred to me not long since, of which the following is an abstract." 356.

This case we shall considerably abridge.

A young gentleman, 18 years of age, was subject for several years to epilepsy ; but with no malformation of the head. The fits vary in frequency from thrice a day, to twice a week. Has no aura epileptica—pulse contracted, quick, and irritable. Our author attended him at the expected hour of an attack, and found that the pulse ceased at the wrists for some minutes before the paroxysm. This he found to be the prelude of a fit in other cases. A blister kept open on the spine for a short time seemed to diminish a little the frequency of the seizures. Repeated doses of oil of turpentine, however, had much more effect in reducing the returns of epilepsy.* The medicine produced copious evacuations from the bowels, and considerable irritation in the urethra, till even some drops of blood were passed after making water. The quantity was then reduced to five drops every morning. But he could not be induced to continue the medicine, and the fits returned with their usual frequency, and his mental powers became rapidly impaired. *August* 1. Is delirous at intervals this evening. Complains of pain in the course of the nerves of the lower extremities, with frequent sensations of cold along the spine, sometimes ascending to the head. *August* 31. Has frequent tetanic spasms.—The cerebral symptoms have been relieved by leeches and cold affusion to the head. Perspires copiously—pulse quick but soft—tongue white in the centre. *Sept.* 1. Has had slight cramps in the lower extremities, and is often affected with convulsive laugh.—Determination to the head—leeches, cold affusion, &c. *Sept.* 3*d.* Skin soft and moist—hearing morbidly acute—sight improved—memory and other intellectual powers natural. *Sept.* 4*th.* Feels well. He continued convalescent till the middle of September, when he went to the country for change of air.

Dr. Reid has selected the foregoing case as remarkable for the number and variety of the changes from one spinal disease to another. In all the cases our author has had an opportunity of observing, " the rapidity in the changes of the morbid actions, during the paroxysm, often differed very much ; *but the regular succession in which they followed each other was invariable.* It appears to Dr. Reid, that each succeeding occurrence, is the natural consequence of that immediately preceding. The first symptom of attack, he avers, is the suspension of the pulse, varying in duration from a few seconds to about three minutes—the longest period he has yet

* It is unpleasant to see contradictions in a plain statement of facts.—Dr. Reid avers, that the patient had no fit between the 26th June and 18th July, after stating in the very paragraph preceding this, that he had a fit on the 1st July.—*Rev.*

known. The *aura epileptica* is uncertain, for in many cases it does not occur at all.

"If all the other powers which contribute to circulate the fluids in the animal frame became quiescent at the time the heart ceased its activity, the well-known phenomena of fainting would be the consequence. But, during the epileptic quiescence of the heart, it appears that an accumulation of blood is taking place in another direction; for immediately, often instantaneously, a tetanic rigidity of the entire frame succeeds, during which the air is sometimes so suddenly expelled from the lungs, that the patient utters a piercing shriek. I have seen patients hop five or six times on both feet, with their bodies perfectly rigid, before they fell. It has been attempted to prove in the Treatise before referred to, that the tetanic rigidity of all the muscles of the frame was consequent upon accumulation of blood, or other irritation in the spinal nervous mass. That this is the case in the present disease is confirmed by the examination of those cases which have proved fatal after only a few paroxysms, and before the injurious effects of the disease were conspicuous in other parts. When this accumulation amounts to compression of the nervous structure, the patient falls, and all the parts are for a moment relaxed. The animal economy now imperiously requires the function of respiration, which had been suspended during the phenomena before-mentioned; but this suspension of respiration was gradually causing an accumulation of blood in the head, so as to bring the brain into an apoplectic state, by which means the control of the brain over muscular action is interrupted. Hence arise the irregular actions of the complicated organs of respiration, forming those convulsive struggles which are so peculiarly characteristic of this disease." 362.

We confess that to us there appears much fanciful supposition in the foregoing theory. We see no proof whatever, that, upon the suspension of the heart's action, there should be an accumulation of blood in the spinal nervous mass, more than in other parts.—Why should not syncope, in other cases, produce the phenomena of epilepsy? What right have we to suppose that the *other moving powers* of the circulation go on during the *epileptic* quiescence of the heart, but cease in common fainting? We do not believe that the arteries cease to contract and go on propelling the blood in syncope—and for this reason, that we know they do propel it into the veins after death itself, which must surely be the greatest degree of syncope.

We now proceed to state a fact—at least, Dr Reid asserts it to be a fact—although we are very far from agreeing with our author in his mode of accounting for the said fact. This is, the immediate termination of the paroxysm by mechanical means. These means are twofold. One method consists in forcibly extending the hands and opening the fingers of the patient;—the consequence of which is, that—"so much exertion is involuntarily made by the patient to oppose this, that the violent operation of the respiratory muscles subsides, the organs fall into their natural train of action, the patient draws a heavy sigh, and the paroxysm is at an end."—

The other mode of stopping the paroxysm is still more powerful, in our author's experience. It is to be accomplished—"by pressing the closed hand of an assistant forcibly on the soft part of the abdomen, towards the spine, while the patient is firmly supported on the back, with the head and shoulders raised."

We have said, that in admitting the facts, on the testimony of Dr. Reid, we were not inclined to subscribe to the doctor's explanation of them. It is but fair, however, to let him explain himself.

"When making experiments some time ago, for the purpose of ascertaining what part of the animal frame was particularly acted on by nux vomica, when taken in excess, I found that the animals (rabbits and dogs) in a short time after receiving the poison into their stomachs became tetanic. During the spasm I observed that the peritoneum seemed closely to invest and compress the contents of the abdomen. Upon pressing forcibly a part of this membrane between my fingers, for the purpose of detaching one portion of it, so as to relieve the supposed compression of the bowels, I was rather surprised to find the spasms totally relax, and the animal begin to breathe, as if recovering from much fatigue. The moment the peritoneum was let loose, the spasms returned with violence; and this could be repeated at pleasure."* 364.

Reflection on the foregoing phenomena led our author to the two modes of arresting the epileptic orgasm, which we have just detailed. It is certainly of comparatively little consequence how the facts are accounted for—provided they *are facts*—and we hope they will be proved such by the experience of others. Considering how much mischief is done by protracted epileptic paroxysms, we think, Dr. Reid will be entitled to the thanks of the profession if his modes of shortening these convulsions of nature be verified by general experience.

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25. *Liver Cough.*† In the number for December 1821, of this Journal, we stated the particulars of an interesting case of sympathetic (or as Dr. Brooks insisted, of *liver*) cough, on which we took the liberty of giving our opinion that the evidence of enlargement of the liver was defective, while the existence of a collection of fæces in the colon was indisputable. Dr. Brooke maintains his opinion still that the disease was enlargement of the liver—and the best answer we can make him is to refer him to Mr. Callow's case of supposed enlargement of the liver, reviewed in Number 1 (New Series) of this Journal, for June last. In the relapse of the young gentleman, detailed in the recent volume of the Dublin Transactions, we see as little proof as before of hepatic disease.

* "It may be worthy of observation, that after repeating the above experiment of alternately compressing and letting go the peritoneum several times, the animal at length ceased to be affected by spasm, although upon killing it the poison was found still remaining in the stomach and small intestines." 364.

† Dr. Brooke. Dublin Transactions, Vol. iv.

It is true mercury cured the cough—but surely Dr. B. will not insist upon this circumstance as proof of diseased liver. It appears that the young gentleman had been living imprudently in respect to food, and had got cold in travelling up from the country.

"On the first of February he awoke, and found with dismay that the well known *bark* had returned precisely as before. I saw him in the course of the day, and soon recognised the harsh, loud, and monotonous cough. It was not perhaps so severe or frequent as last year, but was, indeed, very distressing; pulse 70, and rather weak; breathing perfectly regular; skin cold; tongue white, but quite free from fur; belly rather drawn in than tumid, but soft, and without any pain on pressure. He reported his bowels as regular, and his urine as being in small quantity, and high coloured.

"I could not discover any enlargement of the liver, or tenderness in the side. Conceiving, however, that the cough might arise from irritating fæces somewhere pent up in the intestinal canal, I ordered an active saline purgative. Nothing extraordinary appeared in the evacuations, and the patient only felt weakened by its effects, and expressed his belief, founded on former experience, that mercury alone could afford him relief. My conviction being quite in unison with his feelings, I prescribed on the following day a drachm of blue pill, with half that quantity of gum ammoniac, to be formed into twenty-four pills, two each night, and one each morning. His appetite was indifferent, and with the exception of solid animal food and wine, he was allowed to live as he wished. He continued on this plan for a fortnight, without any apparent change. As before, he coughed the whole day, and passed the night in tranquil sleep; bowels daily regular, but the evacuations unhealthy in both appearance and smell; the urine continued crude and scanty." 146.

After some medicines had been tried without success, mercury was pushed till the mouth became affected, and the cough disappeared.

We have no doubt but the cough, in this instance, as also in the preceding year, was symptomatic of some abdominal irritation; but still we adhere to our former opinion that there is no proof of actual disease of the liver. That its function might be disordered, as well as the functions of the stomach and bowels, we grant. But this is a very different thing from what is meant by enlargement or organic disease of the liver. We could offer some strictures on Dr. Brooke's pathological observations at the end of the case; but we leave them to the consideration of the reader.

III.

SURGERY.

1. *Amputation of the Lower Jaw.** In the spring of 1821, Mary Rice fell on the pavement with much violence. She was taken up insensible, her chin severely contused, and the front incisors of the lower jaw loosened; these soon became discoloured and still less firm in their attachment, whilst she complained of pain, shooting along the throat, from the chin to both ears. In the course of three months, a small, hard, fleshy-looking tumour was observed under the apex of the tongue; and now the front part of the jaw began to enlarge downwards and forwards: although there was much pain and loss of sleep, the little patient retained her appetite and the power of mastication. In the early part of 1823, however, the parts became frightfully enlarged, the bone swelled downwards, and the tumour, beneath the tongue, rose above the level of the teeth, wholly preventing mastication. The disease spread rapidly, and on July 10th, 1823, Mr M'Clellan was called in. The patient was six years old, her countenance wan and haggard, and body emaciated. The whole substance of the bone, in front of its angles, projected downwards before the neck, and backwards rather to the left side of the throat, attenuating the under lip, which was much extended. The skin was highly vascular. Her mouth was thrust open by a huge tumour, rising from the inner surface of the inferior maxilla, and protruding in the shape of an enlarged tongue. Above the molar teeth, it was applied to the roof of the mouth, overlapping, anteriorly, and including in its substance the incisors. Its posterior limits could not be ascertained. Nothing but fluids could be taken, and from the difficulty of deglutition and respiration, the tongue must have been driven almost into the pharynx. As the only chance of saving her life, an operation was decided on, and, on the 13th of July, it was performed in the following manner: An incision was made through the integuments, from the left commissure of the lip obliquely downwards and outwards, over the anterior edge of the sterno-mastoideus, so as to command the carotid, should it be necessary to tie on that side. The anterior edge of this incision was then raised, and the lower part of the tumour exposed. The integuments were next dissected forwards, till the whole tumour was exposed round to the opposite side. The facial artery was at once secured, where it emerges from the submaxillary gland, when the hæmorrhage ceased from nearly all the divided twigs. The insertions of the masseter muscles were then dissected up, to expose the sound bone, which was immediately divided by a metacarpal saw. The tumour was then turned outwards from the mouth and dissected from the under surface of the tongue, the submaxillary glands, and the muscles on each side. Part of the sublingual glands and left submaxillary, being tumefied and rather discoloured, they

* Dr. M'Clellan. Medical Review and Analectic Journal, No. I.

were cut out. Three arterial twigs beneath the tongue required the ligature. Only six or eight ounces of blood were lost during the operation, which took up four minutes and a half. The patient did not faint, but was at first nearly suffocated with the blood which passed down her throat. It being ascertained that no morbid structure was left behind, the large flap was reapplied, and the edges of the external incision kept together by three interrupted sutures and adhesive plasters. The cavity beneath the tongue was partly filled with patent lint, bent into the shape of the lost bone, upon which the hanging integuments were lightly braced by a bandage. After the dressing, the tongue regained its natural situation, and the little patient could articulate and even drink some water. No pain was felt and she slept soundly: the bowels were kept open, and broths, &c. given for food. On the 4th day, the dressings being removed, the external wound had agglutinated by inflammation; the internal cavity was suppurating profusely, and granulations having sprung up, the dressings were removed altogether, on the 7th day. In three weeks complete cicatrization externally and internally. The cut extremities of the bone had ossified to about an inch in front of the angles, and the new flesh beneath the tongue had become a ligamentous mass, which answered for bone, and to it the muscles became adherent. The child soon became robust and grew rapidly, with her articulation accurate. The only external trace of the operation was the linear cicatrix of the first incision and a transverse wrinkle beneath the chin, from the contraction of the integuments. About four months afterwards, however, she caught a cold with fever, and, soon, the right submaxillary and neighbouring lymphatic glands became swollen and painful. Under depletion, &c. all speedily subsided, except the submaxillary gland, which continued indurated, while the integuments of the chin became dry and corrugated. The cicatrix under the tongue assumed a yellowish-white colour, and the chin increased in density. In January, there was excessive tumefaction, with external ulcerations. Deep fissures formed in the skin, discovering a dense mass of a cheesy, cartilaginous nature, like the tumour which had been removed. Large sloughs penetrated the cheek, exposing the cavity of the mouth, with intolerable fœtor. Emaciation and debility rapidly hurried the little sufferer to the grave. She died on the 22d of March. Little pain or loss of sleep had been experienced. On dissection, the heart was found enlarged in substance and much distended with blood. Two small cartilaginous incrustations on the surface of the ventricles. Pericardium fully distended with reddish serum. About one-third of the exterior of the lungs was quite white, the remainder as usual. Some small tubercles, two scrofulous, about the ramifications of the left bronchia. No other viscus diseased but the liver, which was studded over with white spots, of the size of grains of wheat.

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2. *Treatment of Hernia.** Dr. Kinglake may bid adieu to the

* Dr. Kinglake. Med. and Phys. Journal, Nov. 1824.
Dr. Balfour. Ditto ditto.

honour of becoming one of "the peerage of the profession,"—that is, a member of the "New Society of Physicians." He has "lost caste," by daring to pollute his fingers by contact with a "hernial protrusion." As long as the worthy doctor confined the application of cold water to gouty toes, he was safe:—but when he extended his favourite remedy to bubonocele, and transgressed the laws of the Society "*by pressing steadily yet forcibly at the basis of the swelling, with a view to insinuate, as it were, a small portion of the air lying nearest to the hernial aperture,*" he passed the Rubicon, and shut himself out from the "PEERAGE." Dr. Kinglake has occupied some pages of our respected cotemporary with the important discovery of employing *cold* to a "hernial protrusion"—a discovery which may be found in every surgical work for the last twenty or thirty years.* The rationale of the application is equally novel—namely, the influence of cold in condensing the rarified air of the hernia below the stricture, "and imparting to it a density or resisting power that renders it capable of being wielded and pressed with *a wedge-like force* against the abdominal aperture." To this last part of the rationale, we willingly assign the title of *novelty*. Perhaps Mr. Brande or Sir Humphrey may invent a frigorific mixture that will give *solidity* to air, and then its "wedge-like" *form* as well as *force* will be irresistible. There is another proposition in the doctor's erudite paper, to which the surgical world will, we are convinced, unanimously assent—namely, that—"to endeavour to force into the cavity of the abdomen, through a definite opening, *a bulk much too large for its dimensions*, is to grapple with an impossibility." Dr. Kinglake has forgotten to give us an explanation of the expansion or rarefaction of air on passing from a temperature of 92°, inside of the abdomen, to one considerably lower, when outside of that region. "In intestinal hernia," says the doctor, "the size is chiefly made up of *air*, the *rarefaction of which* causes a distending *expansion* that is often acutely painful." We see no cause for this expansion of air—and yet we allow that expansion of bulk in the hernial protrusion often takes place. Is this not owing to the extrication of a *gazeous* fluid from the contents of the bowels, in consequence of the diminished vitality in a portion of incarcerated gut? Do we not see the same thing take place in the intestines of people who are moribund—and still more strongly after death? This, we think, is the true cause:—not expansion of air, but extrication of gas. The application of cold is rational and proper—but who, except Dr. Kinglake, would think of bringing the practice forward, at this time of day, with all the "pomp and circumstance" of a novel improvement in hernial taxis.

Not so with our worthy friend of "Auld Reekie," Dr. Balfour. He has made another *striking* discovery—namely, that the best way

* See Hooper's Surgeon's *Vade Mecum*, 3d edition, page 142—or rather Sir Astley Cooper's great work, from which the article *hernia* is entirely taken. We quote the *Vade Mecum* purposely on this point, that Dr. Kinglake may not have to go far for the novelty of his practice.

of pushing *up* a hernial protrusion, is to pull it *down*. Has the doctor taken a trip in the steam-boat to Belfast lately? Else where did he learn to make bulls? It was so long ago as 1814, that Dr. Balfour was so fortunate as to reduce an incarcerated hernia in the above novel manner, and, strange to say, he entirely forgot the fact, till one day lately when "rummaging among a parcel of manuscripts," the case presented itself to his eye. He lost no time in taking the opinion of the most eminent surgeons in Edinburgh, and it appears, that "every one stared at mention of the fact." "All agreed that it was new"—and all were astonished that the idea did not strike themselves long ago. The doctor has only produced one specific opinion, however, and that is in the form of a short note from Mr. Liston. His answer, in our humble opinion, is any thing but favourable. He too admits that the practice is new; but he "doubts the practicability in some instances and the propriety of it in others." Surely Mr. Liston must have been quizzing the doctor when he admits the "sound principles" of pulling down a piece of fresh intestine through the stricture, in order to give the inflamed and swelled part below time to cool and shrink! Such, however, is the principle on which this new practice is founded. We refer the reader to the journal in question for further particulars.

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3. *Paracentesis Thoracis.** In the course of last winter, we recollect hearing read, in one of our medical societies, a proposal from Dr. Carson of Liverpool, to make an opening into the chest, in cases of ulcerated lungs, or in other words, broken down tubercles, in order to let the lung collapse and the ulcer heal. We were astonished that any modern physician, acquainted with the general condition of the lungs in confirmed phthisis, should make such a proposal, or execute, as Dr. Carson did, so hazardous and hopeless an operation. We scarcely remember opening any case of suppurated tubercles where the surrounding portions of lung would have permitted collapse however large an opening might have been made into the chest. To this, may be added the adhesions which so generally prevail in such conditions of the respiratory apparatus. The very case in which Dr. Carson tried the experiment, proved the truth of the above observations. The following case will also bear on this subject, and may afford a salutary caution to the young and temerarious surgeon.

Case. A man of the name of Meyer, 42 years of age, ill for several years, had had a venereal affection, for which he took a great deal of mercury. There supervened a diarrhœa, which, after having resisted every kind of treatment, went off of itself. He was much addicted to drink. In the summer of 1819, he was attacked with pneumonia of a violent character. Leeches and blisters applied; for a long time he spit blood and was harassed with cough and difficulty of breathing. These symptoms, how-

* Dr. Wademeyer. Mag. Fur die Gesammte Heilkunde.

ever, disappeared, to usher in another kind of disease, accompanied with swelling of the extremities. At the same time, rheumatism developed itself in the arm, for which the Limmer waters were taken. About the end of August 1820; the swelling of the feet and asthma acquired additional intensity; cough convulsive; urine scanty and sedimentous; countenance livid and cachectic, with slight diarrhœa. There never existed a well marked fever, though the pulse was small and frequent. No pain in the chest, but a greater feeling of constraint in the left, than in the right side. In the affected side a seton was inserted, and digitalis, squills, and infusion of Saint Ignatius' bean were ordered. These attacks went on augmenting, and the patient entered the hospital with the following symptoms:—great difficulty of breathing; dry and convulsive cough; lies on his back; cannot recline on either side; pulsations of the heart almost imperceptible; pulse quick, more than 100 in the minute by day, and upwards of 110 towards evening and by night. The right side of the chest, which appeared at first the seat of inflammation, gave a dull sound by percussion, which caused a suspicion of adhesions there. The right side sounded clear, but more so towards the spine—a feeling of oppression in the precordial region as though effusion had taken place above the diaphragm. The skin of the thorax, as it were, infiltrated, œdematous; countenance bloated and of a bluish hue. The lower extremities, the left one more than the right, considerably swollen; diarrhœa trifling;—often during the night he awoke starting, &c. The author and another surgeon suspecting effusion into the thorax, persuaded the patient to submit to paracentesis. An incision was made, about three inches in extent, between the sixth and seventh ribs, in the middle of the space comprised between the sternum and vertebral column, on the left side of the chest. No water issued out, but the lungs filled the opening; respiration became difficult and the disease acquired its utmost intensity. The finger was introduced, then a full sized sound, into the wound: no liquids appeared. Here, thinking the true state of the case had been mistaken, they stopped up the wound with sticking plaster. The difficulty of breathing augmented, inflammatory symptoms developed themselves, and, 48 hours after the operation, the patient died.

Dissection. Right lung perfectly sound and without adhesions. Two ounces of bloody serosity were enclosed in the thoracic cavity of the same side. Heart healthy, though the pericardium contained a little water. The left lung was neither altered nor inflamed. The wound went deep into the thoracic cavity;* the incision had been made too low, and it is probable, says the author, that the diaphragm had been wounded. (It is singular, that

* We cannot understand how they ascertained this circumstance, unless it was by observing a wound in the lung of that side. It surely was bad surgery to push a trochar to any depth, without being perfectly certain that a fluid was present opposite to the site of the puncture. The pleura ought to have been divided carefully with a scalpel, where there was any doubt.—*Rev.*

in opening the body, this is expressed as a doubt.) The left cavity of the thorax contained about a pint and a half of serous turbid liquid. The lung, which, in one place was adherent to the pleura, was found placed before the wound as was said above.—The liver was much softened and adhered in many places to the peritoneum.

As was remarked at the beginning, this operation may prove a salutary warning to bold surgeons. Indeed, we cannot see the prospect of advantage in drawing off an effused fluid from the chest, which has resulted from inflammatory action. The cause must be removed, and the absorption trusted to nature, assisted by medicine rather than the knife.

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4. *Tracheotomy performed with a successful result in Cynanche Trachealis.* In the Repository for July, a case of this kind is published by P. Hume, Esq. of Coventry. However easy the operation of tracheotomy in itself really is, it is generally considered as formidable, and sometimes, perhaps, the unwillingness of practitioners to undertake it may deprive the patient of the only remaining chance of escape from the formidable attacks of croup, &c. The subject of Mr. Hume's case was a female of the name of Boddington, aged 31, who suffered an attack of croup, but did not call in his assistance until it was too late to expect any benefit could be derived from medicines.

A consultation was immediately called, the patient was bled; and the operation performed in an hour after the first visit of the surgeon. She was relieved as soon as the trachea was cut into.—She was put to bed in a sitting posture, the wound was neither dressed nor covered. A saline aperient was exhibited. In the evening of the same day, she was free from fever, pulse 95.

She continued to go on well, and in twenty days after the operation, was enabled to attend to her domestic concerns. Mr. Hume observes, "it is questionable how far the operation may be successful in children." That in young subjects the difficulty of operating will be increased must be admitted, but we apprehend the same good effects may be expected from it when performed in them, as in adults. The late Mr. Chevalier performed the operation in children, and succeeded, we believe, twice in rescuing his patients from the distress and probably from the destruction of croup. There are many cases on record in which the presence of foreign bodies, in the trachea, has rendered the operation necessary, and in which it has been performed with success. Each case in addition, however, must be considered valuable and worthy of notice.

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5. *Extirpation of the Ovaria.** Passing over the records of surgery, all of which cannot be depended on, we shall come at once to the recent facts, or alleged facts, communicated in this pa-

* Mr. Lizars. Ed. Journal, Oct. 1824.

per. Three cases of ovarian extirpation occurred, it would seem, some years ago, in the practice of Dr. Macdowal, of Kentucky, which were transmitted to the late John Bell, and fell into the hands of Mr. Lizars. We candidly confess that we are rather sceptical respecting these statements, and we are rather surprised that Mr. Lizars himself should put implicit credence in them.—A woman, supposed to be parturient, was visited by Dr. Macdowal, at the instigation of two physicians, who considered her in the last stage of pregnancy. Dr. M. found the uterus unimpregnated, but a large tumour in the abdomen moveable from side to side. The woman travelled sixty miles on horseback to have an operation performed. Dr. Mac. made an incision, nine inches in length, parallel with the rectus abdominis, and right into the abdominal cavity. The tumour appeared in view, but could not be removed. A ligature was thrown round the Fallopian tube—the tumour cut open (found to be the ovaria) and fifteen pints of dirty gelatinous stuff extracted—"after which we cut through the Fallopian tube, and extracted the sac, which weighed seven pounds and a half." As soon as the external opening was made, the intestines rushed out upon the table, and they could not be replaced till after the operation was performed, which lasted 25 minutes! The wound was sewn up by means of the interrupted suture, assisted by means of adhesive plaster. Dr. Mac. visited the patient *at the end of five days*, though she had come to his own residence to have the operation performed!! He found her engaged in making her bed! She soon returned to her native place quite well. *Credat Judæus, non ego.*—The second case is little less extraordinary, if not incredible. A negress had a hard, painful, fixed tumour in the abdomen. Dr. Mac. placed her on a table—laid the abdomen open—inserted his hand—and found the ovaria very much enlarged—painful to the touch—and firmly adhering to the bladder and fundus uteri. "To extract *this* (two ovaria) he thought would be instantly fatal;" "but, by way of *experiment*," says the doctor, "I plunged the scalpel into the diseased part, when some gelatinous substance, as in the above case, with a profusion of blood, rushed to the external opening, which I conveyed off by placing my hand under the tumour, suffering the discharge to run over it." A quart or more of blood escaped *into the abdomen*. The same dressings, and the same success as in the first case! We cannot bring ourselves to credit this statement.—Not so with the operation performed by Mr. Lizars himself. It was of a very different description from those said to have happened in Kentucky.

A woman had, for some years, suffered from an enlargement of the abdomen, which had often been mistaken for pregnancy by medical practitioners. "On examination," says Mr. Lizars, "the tumour occupied the *whole* abdominal cavity, and appeared to roll *from side to side*." This is rather loose description, and we are somewhat at a loss to understand it. There was also a lumbar abscess in the case. She had been twice tapped for dropsy of the left ovary. She suffered great pain, and anxiously desired an operation, which was performed by Mr. L. on the 24th Oct. 1823, in presence of Drs.

Campbell and Vallange, together with Mr. Bourchier, of the 36th Regiment. He commenced the operation with a longitudinal incision on the left side, parallel with the linea alba, and reaching from near the ensiform cartilage to the crista of the pubis, through the integuments. The peritoneum was then cautiously opened, and the internal made to correspond with the external incision. The intestines rolled out, and were enveloped in a warm and wetted cloth. Mr. Lizars now proceeded to examine the state of the tumour—but to the astonishment of all present, there was no tumour to be found. We think it was very fortunate for the operator that this was the case—for had there been a tumour extirpated, the patient would have had little chance of life. She did recover from the present operation, however, and lives to tell the tale. The cause of the deception does not appear very clear to us. Mr. Lizars attributes it to "the great obesity and distended fulness of the intestines, together with some protrusion pubic of the spine at the lumbar vertebræ." Be that as it may, we do not think that the cases brought forward in this paper will have the effect of rendering surgeons more bold in operating for the removal of abdominal tumours, whether ovarian or of any other kind.

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6. *Chronic Enlargement of the Tonsils.** "Catherine Collins, ætat. 10, presented herself to me in the month of June last, with considerable enlargement of both tonsils, by which deglutition and articulation appeared much impeded, her countenance expressive of much anxiety and distress, respiration affected; she appeared emaciated; for some time back she has been unable to swallow any thing but fluids, and has been fed on broths. On particular inquiry into her case, I ascertained that about two years back she had had simple cynanche tonsillaris, which was then neglected and has since gradually verged into the chronic state, slowly increasing until I saw her. Nothing decisive previously had been done for her. On examination, I found the tumours of a pyriform shape terminating in apices, the bases apparently involving the substance of the tonsils themselves, occupying nearly the entire space of the half arches of the velum pendulum palati; the uvula hanging undisturbed in the centre; between them a fissure appeared capable of admitting a crow quill into the pharynx. Their surface appeared covered with venous ramifications turgid with blood; texture firm and compressible in some parts, indurated in others. I determined to try local treatment previous to the proposal of extirpation, as the patients' sufferings were such as loudly to call for decisive interference. I immediately made several deep incisions into their substance, conceiving that the local hæmorrhage would materially contribute to their reduction; purgatives of the saline class were liberally exhibited, and extensive irritation of the cutis produced by frictions of the ung. antim. tart. below the angles of the jaws, and corresponding as near as possible to the internal tu-

* Dr. Wm. Belcher, Member of the Royal College of Surgeons, in Ireland. Bandon, County of Cork.—*Private Correspond.*

mour. The pil. hyd. submuriat. c. was afterwards prescribed as an alterative. This method of treatment was repeated and assiduously persevered in for three months, and it was satisfactory to observe that the tumours were gradually reduced, to the great comfort of the patient, and are now nearly extinct. I relate this simple case merely for the purpose of corroborating the good effects of this truly valuable agent (the ung. ant. tart.) when persevered in. In my opinion, we owe much to the late illustrious and lamented Dr. Jenner, who first brought this remedy into practice, and called the attention of the profession to it in his letter to the late Dr. Parry of Bath. If these methods had failed, I was determined to extirpate the tumours by the ligature in preference to the knife (by the silver wire applied with Levret's double cannula.) My reason for this preference is from witnessing a case of extirpation by a scalpel when I was a surgical pupil. The subsequent hæmorrhage was so profuse that the patient was nearly lost, and nothing but the immediate application of the actual cautery saved his life. The ligature to be sure is tedious and sometimes productive of irritation; but query? is it not the safer method of the two. We have great authority certainly for the knife. Desault used both, but he preferred the knife, as also do most modern surgeons, Dupuytren, Lisfranc, and Beclard, at Paris; Sir A. Cooper, and others, in London; Liston, in Edinburgh; and Colles and Carmichael, at Dublin, think of nothing else. I should like to hear the decided opinions of the most experienced on this subject."

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7. *Sudden Death during an Operation.* A most melancholy event happened lately in the surgical practice of M. Dupuytren, which involves some curious physiological and surgical considerations. On the 19th November, 1822, a fine young woman (Alexandrine Poirier) came to the Hotel Dieu, for a tumour of some size, situated on the posterior and lateral part of the neck. From its hardness, renitency, and insensibility, M. Dupuytren ascertained that it was of a cellulo-fibrous nature, and proposed its removal, to which the young woman consented. The operation was performed on the 22d of November, with all the skill and dexterity of that celebrated surgeon. No arteries were cut that required the ligature, and consequently, there was very little hæmorrhage. Neither were there any muscles or large nerves divided. Just, however, as he was proceeding to separate the last shreds of attachment, and turn the tumour out, he was surprised to hear a somewhat prolonged hissing noise (sifflement prolongé) similar to that produced by the re-entrance of air into a vessel from which it had been exhausted. The operator stood for an instant astonished, and observed, that, were it not for the distance of the knife from the air passage, he would have thought he had made an opening into it. He had scarcely said the word, when the young woman cried out that she was dying, and instantaneously dropped down on the floor a lifeless corpse, to which all their efforts could not restore the slightest symptom of animation. This happened in the presence of nearly 400 spectators, and the body was exam-

ined next day, in the presence of full as many, with the most rigorous minuteness.—Every part of the body was carefully dissected; but there was not a particle of morbid structure any where to be found. An examination of the heart, however, disclosed the cause of the melancholy catastrophe. The right auricle was distended like a bladder with air, which rushed out when cut open, without any admixture of blood. Fluid blood was found in the other cavities of the heart, as also in the different vessels. Great quantities of air were found in all the vessels. There was no other unnatural appearance in any part of the body.

We have not the smallest doubt that Dupuytren was perfectly correct in his conclusion, that air had rushed in through one of the veins of the neck, and thus caused instant death. It is, perhaps, the only case on record of the kind, and so unlikely to happen often, that it can be no serious objection to any operation on the neck or other part of the body. We think it is a pathological fact, however, which bears on the physiology of the circulation. It proves that the heart acts as a sucking as well as a forcing pump, otherwise air would never have passed from a cut vein in the neck down into the right chambers of the heart. It is highly probable, that, in consequence of the morbid state of the parts, the mouth of the cut vein had remained patulous, and thus readily admitted the air.

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8. *Great Tumour removed from the Neck, by Dupuytren.* Our readers are in possesion of the facts attendant on the melancholy case of a young woman, operated on by M. Dupuytren, where the introduction of air by a vein caused instant death in the operation room. The case now to be stated, was sent, as a set off to the other, to the royal Academy of Medicine, and read at the same time. The patient, Madame Thiebault, 21 years of age, was a favourite of the Duchess of Berry, and about two years previously perceived a small tumour on the top of the right shoulder, which enlarged to such a size, that M. Boyer was consulted. He advised that no operation should be performed, and prognosticated that the removal of the tumour would be fatal. This advice not being relished, M. Dupuytren was called in. He found an enormous tumour occupying the posterior and lateral part of the neck, on the right side, extending from the mastoid process to the inferior angle of the scapula. The tumour was hard and unequal on its surface. It was every where firmly adherent to the neighbouring parts. The skin covering it was tense, and full of dilated veins. The patient experienced sharp pains in the tumour, and was unable to use the right arm, in which there was a sense of unpleasant formication.

Taking into consideration the age and constitution of the patient, the rapid growth of the tumour, and the inevitable fatality of the disease, if left to itself, M. Dupuytren magnanimously undertook its removal, and the lady as magnanimously submitted to the terrible operation, which was performed on the 27th September, 1822, in the following manner.

M. Dupuytren made an incision, ten or twelve inches in extent,

over the greatest diameter of the tumour—that was, from the top of the cervical column to the acromion scapulæ. The trapezius muscle being thus exposed, was divided, and the tumour itself came in view. By a long, painful, and we need hardly say, dexterous dissection, during which many arteries were cut and tied, this enormous tumour was turned out by main force and free incisions. It fell on the ground and bounded like an elastic ball. Several arteries, which gave out blood freely, were secured, and the immense wound was dressed. The intrepid lady never complained during this terrific dissection, but talked calmly to the surgeon all the time. In the night of the same day the lady was seized with pain in the throat, with difficulty of swallowing; but these symptoms were removed by a moderate bleeding. A kindly suppuration became established—granulations shot forth—the limits of the wound decreased—and the lady got perfectly well and has remained so.

The tumour weighed six French pounds—was of a fibro-cellular texture—and contained some intermixed portions of albuminous lymph. In some points, the tumour appeared to be taking on the carcinomatous character.

The event falsified the prognosis of M. Boyer; but, probably, there were few other surgeons than M. Dupuytren, who would have undertaken so terrible an operation.

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9. *Purulent Ophthalmia of Infants.** Mr. Ryall, by the most persevering industry, and no inconsiderable talent, has established, for several years past, a National Ophthalmic Infirmary in Dublin, and raised for himself an unquestionable reputation in the line of practice to which he has attached himself. And now, that the main difficulties of his undertaking are overcome, we are glad to see him employ an occasional leisure hour in laying before the profession some of the results of his experience.

The purulent ophthalmia of infants, or acute inflammation of the conjunctiva, consigns to irremediable blindness, by its unfavourable termination, many children annually. The patients brought to the Eye Institution affected with this disease, are, for the most part, the offspring of the very poorest class—and, many of them, those born in the Lying-in-Hospital. The mothers too often neglect to apply for medical aid till all hope of affording relief is fled. Some do not come till protusion of the iris has taken place. One woman lately brought, in a wine-glass, both the lenses of the infant's eyes, with part of the vitreous humour which had escaped before application was made for relief. Mr. Ryall is of opinion, notwithstanding authority to the contrary, that the disease in question is communicated to the infant at the time of birth, by some morbid secretion of the mother. However this may be, the power which the ophthalmic discharge afterwards possesses of communicating the ophthalmia, is indisputable. Mr. R. had, at the time of writing, several nurses under his care, in whom the ophthalmia

* Isaac Ryall. Dublin Transactions, vol. iv.

had been caused by the accidental application of the discharge from the infants' eyes to their own. Our author is likewise of opinion that the ophthalmia produced by gonorrhœal is more violent than that resulting from leucorrheal matter—and more apt to be attended with excessive tumefaction of the palpebræ—chemosis—profuse and ill-conditioned discharge, with rapid tendency to disorganization. In common ophthalmia, the disease often begins in one eye when it is on the wane in the other, from sympathy—but, in the disease now under consideration, if one eye escaped the first inoculation, and was afterwards carefully guarded from contact with the discharge from the other, it escaped altogether.

This ophthalmia, like gonorrhœa, will, in many instances, yield readily to very simple treatment, nay, will even sometimes spontaneously cease. This lulls to a dangerous security.

"Assuming it as a principle, that the destructive progress of the disease is influenced more by the specific virulence of the inoculating fluid, than by any other cause, and my great object being to subdue its action on the secretory surface, I have an earlier recourse to stimulants than the mere definition of acute inflammation would appear to indicate, or than might be deemed expedient by those who 'consider the discharge merely as a symptom, and that neither the process of restoration is materially affected, nor the organ in any way endangered by its continuance.'

"By this early substitution of the stimulant and mildly astringent for emollient applications, I have known the discharge to have been suppressed, and the progress of the disease consequently arrested, in very many cases which, experience and analogy warrant me in saying, would have otherwise terminated unfavourably, or at best have been protracted for several weeks: indeed, the very character of the inflammation would warn us against the long use of emollients.

"The purulent ophthalmia of infants shows itself generally within four or five days after birth, in redness of the conjunctiva lining the palpebræ, and in a thin discharge, which, if permitted to rest on the cilia, agglutinates them so firmly, as to require some degree of force to separate them; in effecting which, a copious flood of tears gushes forth. These appearances are usually accompanied with great impatience of light, feverish heat, exacerbated in the evenings, and not unfrequently with fits. In a short time the discharge becomes puriform, when there is a remission of the pyrexia, the conjunctiva becomes greatly distended, exhibiting, as has been observed, the appearance of red velvet. The eye-lids are now so much swoln, that in the attempt to examine the eye, the orbiculares muscles are everted, requiring even force to replace them, and mechanical aid to retain them *in situ*. The bowels, if neglected, either remain costive, or discharge mucous, or frothy and greenish stools." 349.

Although the disease will now sometimes cease spontaneously, we have much more reason to dread bad consequences, as the death

of the cornea, protrusion of the iris, escape of the humours, sinking of the eye, or, what is worse, troublesome and disgusting staphyloma,—all which, in almost every instance, might be prevented by early and proper attention.

"If recourse be had in the early stage of the disease to medical aid (which, as has been deplored, particularly with the poor, is too seldom the case,) the treatment is then indicated by the definition of 'acute inflammation.' A leech or two, according to the strength of the patient and urgency of the symptoms, are to be applied to the under lid. The eye is to be frequently fomented with a decoction of white poppy heads, which should also be injected between the palpebræ; and, as well to prevent agglutination of the cilia, as to correct the morbid secretion of the tarsi, an ointment, consisting of one part of the ointment of the nitrate of quicksilver, and seven parts of that of spermaceti, should be applied to them twice or thrice a-day. A grain each of the submuriate of mercury and of James's powder should be given every night, at bed-time, and a tea-spoon full of castor oil every, or every second morning. The lower extremities, and if fits occur, the whole body, should be daily emerged in a tepid bath; and the apartment in which the patient resides, if it be practicable, well ventilated, since foul air, and crowded situations, are peculiarly favourable to the malignancy, and perhaps to the propagation of the disease." 350.

When the discharge has passed into a more virulent form, becoming profuse and thin, assuming a deep yellow or greenish colour, it is then time to adopt a different mode of treatment. Various collyria have been recommended, and doubtless have proved useful, but our author has found none so efficacious in changing the action of the secretory membrane, and arresting the progress of the disease as a solution of the nitrate of silver (the crystallized nitrate as being more pure than the fused) in proportion of two or three grains of the mineral to the ounce of simple distilled water, frequently and briskly injected between the lids with a silver or ivory syringe. All warm fomentations and cataplasms should now be laid aside; but if tumefaction of the palpebræ continue, a cold cataplasm of alum-curds, confined between two folds of thin linen or muslin, may be applied during the night, or between the periods of using the injection. Should the conjunctiva be greatly extended by effusion, a leech may be applied to the inner surface of the lower lid, or the projecting portions be removed with a pair of scissors. The strength of the solution may be gradually increased to the proportion of eight grains of the nitrate to the ounce of distilled water. The calomel and antimony are to be occasionally adminsitered at night, and a dose of castor oil, infusion of manna, or magnesia, in the morning. Mr. Ryall also recommends a tea-spoon full of oil of turpentine in a little syrup, if the bowels be much deranged. Under this treatment, the disease will generally yield in a few days, the discharge gradually assuming a lighter colour and a ropy consistence, till it entirely cease.

10. *Laryngitis—Tracheotomy.** Inflammation about the larynx, and especially about the glottis, performs the work of destruction so quickly, if not arrested, that many lives have been lost for want of the operation now under consideration. Inflammations of this kind are often too far advanced to be checked by depletion, when the practitioner is called in; but if respiration can be carried on, for a time, we are pretty sure of subduing the original disease, and thus snatching a victim from a most cruel death. Indeed, we cannot conceive a more horrible situation than that of a person whose air-passage is gradually closing up, and who is, consequently, suffering a protracted death by suffocation!

Case. Mary Dunne, ætat. 30, admitted into the Whitworth Hospital, 25th October, 1823; had been affected with a troublesome cough, since the latter end of August, which had been increased by renewed exposure to cold. On the 21st October, oppression, difficulty of breathing, dull pain about the region of the larynx, and down to the sternum, were added. No appropriate remedies had been employed. On the evening of admission, the cough was frequent, the expectoration tough and copious, respiration difficult, and attended with a hoarse brazen sound—pulse accelerated. It was found necessary to draw blood from the arm, which gave instant relief, and she passed a tranquil night. 26th. The dyspnœa returned. Repetition of the bleeding did not bring the expected relief. 27th. All things getting worse.—Sound of the cough is like that of croup—the respiration difficult, and obstructed by much viscid mucous—pulse 120—pain in the larynx and sternum. Six leeches to the larynx—an emetic of ipecacuan—pills of calomel and ipecacuan. She was a little relieved by the leeches and emetic. 28th. Worse to-day—eight more leeches—"From the report at noon, it appeared that she felt some temporary alleviation after the leeches; her countenance, however, was quite livid, and expressive of extreme anxiety, with a look of wild despair; her eyes protruded; respiration was nearly impracticable; the extremities, as well as the whole surface, were becoming cold; pulse fluttering and feeble, above 130. She was, however, in perfect possession of her intellect, and implored that something might be done to afford her relief under the extreme urgency of her suffering." It was evident that nothing but an operation would now afford relief. Indeed, we think the knife was resorted to quite late enough.

Operation. Mr. Carmichael arrived, and almost immediately proceeded to work, judging that the period of affording relief, even by this measure, was probably past.

We shall give but a very brief description of Mr. Carmichael's operation, as it is now frequently performed, though not without some difficulty. An incision, an inch and a half in length, from the lower edge of the thyroid gland, was made through the integu-

* Dr. John Crampton—Mr. Carmichael. Dublin Transactions, v. 4

ments, and then between the long muscles, till the trachea was laid bare. This was happily performed with the loss of only a few drops of blood, "notwithstanding the difficulty which the perpetual motion of the trachea opposes in a person incessantly gasping for breath." Two or three rings of the trachea were then divided, and the opening widened by means of a large pair of sharp-pointed scissors, such as Mr. C. employs for the operation of hare-lip. The patient coughed up a large quantity of viscid phlegm through the opening, and seemed much relieved, the appearance of suffocation being quite removed. Our author feels satisfied that a simple incision into the trachea, and the insertion of a tube, would have been productive of no benefit. The grounds on which he makes this assertion do not appear valid to us—and simply because we have seen the division and insertion succeed in as bad a case, (nay a worse one) than that of Mr. Carmichael's. One positive fact is, therefore, worth fifty negative ones. The slit in the trachea soon accommodates itself to the shape of the tube—and if the tube comes out now and then when the patient is expectorating, it is of no consequence. It can be easily replaced. We make this observation, because we know, from experience, that, in many cases, it would be totally impossible to cut out a lozenge of trachea, as recommended by Mr. Carmichael—where, for instance, the parts are swelled and inflamed from the application of blisters, as is often the case; and where the tube lies an inch deep among working muscles, while the trachea itself is in constant motion. Under such circumstances, we have known a simple slit produce such instantaneous relief that the patient fell fast asleep the moment the opening was made.

The patient did well, and only required great attention in clearing away the ropy mucous from the opening in the trachea. The wound closed in a fortnight, and the cure was complete. The promptitude and dexterity with which Mr. Carmichael performed the operation are very praiseworthy.

We would first remark, that the system of local depletion and counter-irritation pursued in the first instance, when the patient entered the hospital, appears to us to have been very inefficient. No disease requires such decisive depletion, local and general, as laryngitis—and we appeal to the record, whether this decisive depletion was put in execution. From the speedy cure, it is evident that there was nothing more than mere inflammation to contend with here—and we are not without a suspicion that it might have been quelled some days before the operation, by very active treatment.

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11. *Hæmorrhage into the Bladder.** A gentleman, 73 years of age, had been affected, for many years, with diseased bladder, apparently disease of the prostate gland, and attended with the usual symptoms, frequent inclination to make water, ischuria, and

* Mr. A. Copland Hutchinson. Med. Repos. Aug. 1824.

sometimes complete retention, requiring the use of the catheter. About the end of 1821, the disease became aggravated, the urine occasionally tinged with blood, and a lithic deposite in his water. The prostate gland, on examination, was found to be much enlarged. On the 26th of February 1824, he was seized with retention of urine, and much difficulty was experienced in introducing a catheter, when a great deal of urine, mixed with some clots of blood, was drawn off. After this, he was pretty well for a few days, requiring, however, the catheter. On the 2d March, he was suddenly seized with great pain, and sense of distention, although the urine had only been drawn off a quarter of an hour previously. It was now evident that blood was effused in the bladder.—No effort could remove this *per vias naturales*, and Mr. Hutchison proposed to Sir Astley Cooper, to cut into the bladder above the pubes. This was done by Mr. H——, and the coagula of blood scooped out with a table-spoon. The patient went on remarkably well for three days, the water being discharged through a syphon in the wound. It was found, however, on examining the interior of the bladder, with the fingers, after the operation, that there were two fungoid tumours projecting into that organ, one on each side of the urethra, and, from these, it was naturally supposed the blood had come. On the fourth day, his spirits and appetite failed —the wound assumed a bad appearance, and he sunk on the sixth day from the operation.

Cases of this kind are rather rare. It is the first which our author, and the second which Sir Astley Cooper had seen. Leave was not obtained to open the body.

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12. *Successful Amputation at the Hip-joint.** We have related an unsuccessful operation of this kind, performed lately in Germany; it is our more grateful task now to record the fortunate termination of a similar operation, performed at Montpelier, by the celebrated Delpech. We hope soon to have the particulars of Sir Astley Cooper's case, which also had a favourable issue, at Guy's Hospital.

The able Professor of Montpelier justly observes, that there is probably no rule which can be laid down for the performance of disarticulation of the hip-joint, because the operation must be modified by the state of the parts rendering such a dangerous and difficult measure necessary. It is, on this account, desirable that, in all cases of this kind, we should have an accurate history of the disease, and the condition of parts, prior to the knife being applied for their removal.

Case. Joseph Morel had been brought up to the business of agriculture, and enjoyed good health till the age of fifteen. At this period, and after being exposed to very hard labour for days and nights, in succession, he began to experience wandering pains,

* Professor Delpech. Revue Medicale, Sept. 1824.

at first only slight, in the whole of the right thigh. These gradually increased, and as poverty obliged him to continue his miserable mode of life, the limb swelled, and ultimately terminated in an abscess. This abscess was but the prelude to a series of other abscesses, which became fistulous, and gave issue to several fragments of necrosed and exfoliated bone. For 19 years Morel bore the rigour of his fate, with perfect resignation—suspending his labours when fresh swellings and abscesses took place—and renewing them when the discharge of matter or bone gave a temporary respite to his sufferings. He left all to nature, and rarely had any surgical assistance. In the course of this long period, these abscesses had multiplied so as to cover almost the whole of the thigh with their sequelæ—cicatrices and fistulæ. In this condition, he was brought to the Hospital ST. ELOI, on the 20th August 1823, then aged 33 years. He was considerably emaciated—appetite irregular—digestion often deranged—pulse frequent and sharp—chills in the evenings, with fever, succeeded by profuse perspirations in the night. The whole of the thigh was in a state of engorgement, and exceedingly misshapen. The *soft* parts were as *hard* as wood—if we may be allowed an Hibernicism. The probe could be passed through each fistulous opening to the bone, which was, in some places naked, and in others carious. Deep incisions into the thigh did not enable the surgeons to ascertain the exact nature of the disease, and a year's residence in the hospital, under various modes of treatment, only showed an increase of hectic fever and emaciation. It was evident that nothing but amputation could give the poor man a chance of life, and the state of the thigh rendered the removal impracticable, or at least useless, in any other part than at the articulation. This step being determined on, M. Delpech appears to have been under much alarm lest the hæmorrhage should prove too powerful to be overcome in the course of the operation:—he, therefore, determined to cut off the main channel previously to the amputation, by tying the artery at its issue from the abdomen. One reason for this appears to us rather curious—namely, the danger of the assistant stationed to compress the artery, being more attentive to the steps of the operation than to his own immediate duty!

Operation, 22*d June* 1824. The patient being properly placed, an incision was made over the inguinal artery, through a mass of condensed parts that caused much difficulty in laying bare the vessels. At length they succeeded in passing a ligature under the artery, and securing it by a double knot, one end of the ligature being cut away. This done, the outline of the internal flap (that was to be) was traced in the integuments, at the upper and inner part of the thigh, with a scalpel—a measure the utility of which we cannot well understand. A large single-edged knife was next plunged in, close to where the artery was tied, and its point directed so as to come out below the hip, and as much externally as possible—passing close to the neck of the femur, on the *inside* and just above the little trochanter, which was avoided by a slight inclination of the edge of the knife inwards. The knife, by cutting

its way to the surface, thus formed a flap of conical shape, eight inches in length, and consisting of the whole mass of soft parts, at the upper and inner part of the thigh. During this section, very little blood escaped. The flap was held up by the hands of an assistant, when the neck of the femur and the little trochanter came in view. The thigh being now thrown into a state of abduction, the head of the bone formed a protuberance in its articular capsule, and was readily laid bare, by dividing the latter with a scalpel. This effected, the luxation of the bone instantly followed, with a noise which was easily recognised as the signal of disarticulation. The ligamentum teres was next divided. With the same large knife, a horizontal cut was now made of all the soft parts that remained on a level with the great trochanter, *and from the surface inwards*, finishing this cut at the external edge of the capsular ligament. During this incision, a large abscess was laid open, and on turning up this external flap, a number of tubercles were seen, divided by the knife, and presenting a curious green colour. The wound made by these incisions was of enormous extent, but more regular in surface than might be expected, in consequence of the condensation or, as it were, solidification of the different structures, into one homogeneous mass—a circumstance that rendered the drawing out and tying the arteries a matter of considerable difficulty.*

When the vessels were secured, M. Delpech experienced another difficulty in approximating the flaps, in consequence of the extreme rigidity of the parts. By great exertion, this difficulty was overcome, and several sutures were inserted, to aid the other dressings in retaining the parts together. Numerous adhesive straps were necessary.

The patient took, immediately after the operation, two grains of opium. The pains continued six hours, after which the patient was pretty tranquil during the day. The night was passed without sleep, the man being harassed with febrile heat, sense of suffocation, thirst, and pain in his head. 22*d*. Pulse quick and sharp —face slightly flushed—belly painful towards the hypogastrium. Lavements, fomentations, diluents, five grains of hyosciamus. Two stools, in the course of the day. Night calm, and the patient had some sleep. 23*d*. Pulse much less frequent—patient tranquil, but very weak. Had a good night, and several hours' sleep.—24*th*. Craves for food. The dressings are drenched with a reddish serosity. 26*th*. The dressings, as far as the adhesive straps, were removed. Much pus comes from the centre of the stump. The patient appears to do well, and is allowed light aliment.—29*th*. Another dressing—most of the straps removed—the wound

* We recollect amputating a boy's thigh, close up to the hip, where long-continued disease of the bone and soft parts had turned the whole of the latter into a substance exactly like brawn. The blood-vessels on the surface of the stump preserved their natural calibre and sphericity, and we apprehended that no ligature would secure them. It was with considerable difficulty we could draw them out, so as to tie them. The boy did well, and never had a bad symptom afterwards.—*Rev.*

united in several places—three ligatures came away. *6th July.* The suppurative discharge is much diminished—the ligatures are all come away. From the centre of the wound, a tuberculous mass was this day discharged, followed by a great flow of purulent matter. During the next four days, the patient perspired profusely, when asleep, and had heat of the skin, thirst, and quick pulse. Nevertheless, he did not complain; had a good appetite; and rapidly gained strength. His rations were diminished. On the 11*th*, two other tubercular masses came away, after which the cicatrization of the wound made great progress. 18*th*. The night sweats are much less abundant, and all the hectic phenomena are disappearing. The stump is almost healed, and the patient leaves his bed every day. 22*d*. He begins to walk about the ward on crutches. In the beginning of August, the patient was permitted daily to go about the town. On the 20th August, a small exfoliation from the brim of the acetabulum came away from the only point of the stump which remained unclosed. After this, the wound closed, and he was soon able to have an artificial member fitted on, when he took his departure in good health.

In his remarks on this case, M. Delpech reiterates his opinion, that the greatest danger and difficulty would have been encountered, had not the artery been first secured in the groin. We can hardly participate in this opinion. At the same time, we see no particular objection to this precautionary measure, except the additional pain given to the patient, and the increased length of time which takes place during the operation, every minute of which seems an hour to the sufferer.*

* From some cases which occurred in the practice of the translator, many years ago, he is thoroughly persuaded that this operation, in many instances at least, might be greatly simplified, and rendered much less dangerous. A patient had disease of the thigh to such an extent that amputation was obliged to be performed as high as possible, and consequently where no tourniquet could be used. The circular incisions made, the vessels that presented themselves were tied, with little difficulty, and very trifling loss of blood. The bone was bared a couple of inches, and then sawn through. It was found that the saw went close to the little trochanter, and it was evident to the writer, as well as to all present, that the head of the bone could have been scooped out in less than two minutes, and thus the operation at the hip performed, without intending it. The writer has often, since that period, regretted that he did not take out the head of the bone, in order to prove the practicability of it, as he is convinced it would have but very little increased the danger of the operation. He has seen cases where the thigh was carried off by cannon shot, and where the head of the bone might have been easily turned out, in the common way of amputation.

IV.

Therapœia.

Pharmaca nulla valent, nisi quæ sint commoda causis.

1. *Iodine.** The papers, of which the titles are given below, fell into our hands after the review of Dr. Gairdner's work was printed off, otherwise we should have included them in that article.

Dr. Kolley has been severely affected with goitre in his own person, and has taken iodine internally on a large scale, besides having employed the medicine in his own practice :—His observations are therefore entitled to consideration. He commences his memoir with some reflections on the indications and counter-indications in the employment of this powerful remedy.

Contra-Indications.

1. Iodine, he observes, in the form of tincture, harmonizes badly with the nervous system. In persons of much sensibility, even a small dose often gives rise to disagreeable accidents and violent spasms. They experience an inquietude in their limbs which prevents repose, succeeded by a sense of lassitude and weight—deafness—violent cephalalgia—tremors of the limbs—depression of spirits—moroseness—spasms—pallor of the face—lachrymation—great anxiety about the chest—and unconquerable aversion to the medicine. These symptoms are altogether different from those that result from a complete saturation with the iodine.

2. People who have a disposition to congestion of blood in the head or any other internal organ—whose constitutions are of the robust, muscular, and, what is termed, atrabilarious temperament, do not bear well the action of iodine ; particularly if unaccompanied by laxatives. In such constitutions the tendency to local congestion augments—the head becomes embarrassed, and cephalalgia rises to such an extent as to threaten delirium.

3. In all cases where there is a deranged state of the digestive organs, great caution should be used in administering iodine, otherwise dyspepsia and other gastric affections will be increased or produced.

4. All febrile and inflammatory affections interdict the use of iodine, and the same may be said of diarrhœa—local affections of the urinary organs—phthisis pulmonalis—hepatic disorder. Neither should this medicine be incautiously given to those who eat

* Reflexions et Observations sur l'Emploie de l'Iode en Médécine. Par le Docteur Kolley, Médécin à Breslau.—*Journal Comp. Fevrier*, 1824.

Observations sur l'Emploie de l'Iode en Médécine. Par M. Zink, Médécin à Lausanne.—*Ibidem.*

and drink beyond the rules of temperance; else febrile excitement or hæmorrhage will be endangered.

Indications.

5. Iodine may be safely employed where there is no morbid sensibility or irritability present in the system—where there is no tendency to congestion in any organ—where there is no gastric derangement, febrile affection, plethora from too full living, diarrhœa, &c.

Our author confines his observations to the internal use of iodine, not having experience of its external application. He considers this medicine as very powerful in goitre and scrofula—far superior to any other remedy which has yet been found out. But to employ it with success in goitre, it is necessary, first, that the swelling be confined to the thyroid gland; 2dly, that the tumour has not degenerated into a scirrhous or carcinomatous nature; 3d, that the bronchocele be not of too long standing; 4th, that the local affection be not accompanied with derangement of the general health; 5thly and lastly, that the goitre be not inflamed or very painful. The above objections apart, it is very rare that we fail of success in removing bronchocele by iodine.

This medicine possesses an extraordinary power over scrofula, provided there be no strong tendency to phthisis, which iodine would be apt to aggravate. When administered to children, the regimen should be very severe, and they should be kept as much as possible in a regulated temperature, and there have some exercise. Where the constitution of the child is irritable, or there is any fear of hydrocephalic affection, this medicine should be exhibited with the greatest caution, or, rather, it should be abstained from altogether. Our author has found it very useful to combine this medicine with a gentle mercurial, particularly where the disease has continued for some years, as in scrofulous ophthalmia. In such cases it is proper to intermit the iodine occasionally, continuing the mercurial in the intervals.

Perceiving, in common with other practitioners, that iodine has the property of modifying the assimilation, or rather of exciting powerfully the lymphatic and absorbent systems, our author was led to its employment in certain chronic diseases, and derived great benefit from it in herpetic eruptions of the skin.

Dr. Kolley, being himself affected with goitre for ten years, and having tried all the means recommended by authors without success, was induced to have recourse to iodine, as soon as Dr. Coindet's Essay appeared. At this period, his respiration was very much impeded—he could not walk fast nor far—it was even difficult for him to go up stairs, or speak for any length of time. In addition to these symptoms, he was affected with much congestion of blood about the head. He took ten drops of the tincture of iodine, as recommended by M. Coindet, three times a day, for a fortnight, without experiencing any inconvenience. During the succeeding fortnight he experienced an augmentation of the gland, with a corresponding aggravation of all the symptoms above mentioned. He also felt a disagreeable taste in his mouth, diminution

of appetite, but without any alteration in the secretions or excretions. After this the gland began to diminish, and in twelve weeks had almost entirely disappeared. During the whole of that period, our author continued the internal use of the iodine uninterruptedly. He experienced no other inconvenience from the remedy than a diarrhœa for a few days, when he had raised the dose of the tincture to 40 drops. The venereal appetite ceased during the use of the medicine; but our author experienced no emaciation, nor any of the bad consequences enumerated by Coindet and others. This, however, he ascribes to idiosyncrasy, and does not mean to say that such immunity is always to be expected, when the medicine is carried to the extent in which it was used in his own case. For instance, he prescribed the tincture to a female, 45 years of age, of irritable constitution, and long affected with hysteria and spasms. She could not take doses of three or four drops without experiencing great anxiety, tremors, cold sweats, nausea, and agitation.

The combination of iodine with mercury and tonics has been found very efficacious by our author in scrofulous affections, especially of children.

Of the eleven cases which are related by our author, in elucidation of the preceding observations, our limits will permit us to take but a short notice.

Case 1. A peasant girl, 18 years of age, had had an increasing bronchocele for the last five years. It was now of great size, with a sulcus in the middle, and occasioned considerable embarrassment of the respiration. It was hard, tense, and covered with dilated veins. The digestive and other functions were not deranged—nor was there any congestion about the head. Six drops of the tincture of iodine were ordered thrice a day, enjoining a very abstemious regimen. At the end of fifteen days the goitre was rather increased in size, and the breathing more difficult. The dose of the medicine was augmented to eight drops. During the next fortnight, there was a notable alteration in the tumour. It had diminished in size—was less tense—and its vessels less varicose.—These changes were still more considerable by the end of six weeks from the commencement of the plan of treatment. It was persevered in for sixteen weeks, with great diminution of the goitre. At this time, inappetency, headach, nausea, and vomiting came on. The iodine was discontinued, and the consequences, for some days, carefully watched. The patient returned into the country, and, three months afterwards, presented herself to our author, pale and emaciated, with great enlargement of the abdomen. This last, however, was ascertained to be pregnancy. The goitre had almost entirely disappeared. The young lass was safely delivered of a healthy child at the proper period.

Case 2. A man, 36 years of age and otherwise healthy, had been goitrous from the age of sixteen. When examined by our author, the tumour was large, uniform, and solid, with some elasticity. It caused great difficulty of breathing, wheezing at each

inspiration, cough, and alteration of the voice, with congestion about the head. Six drops of the tincture of iodine were prescribed three times a day, and a laxative twice a week. This plan agreed very well. The goitre diminished fast, as did the difficulty of breathing. At the end of eight weeks the tumour was so much reduced that the iodine was discontinued, the patient beginning to complain of gastric affection, which disappeared in a few days afterwards.

Case 3. This was a case of goitre in a young girl. When she had taken the iodine for three weeks, she suffered such anxiety, lassitude, burning in the throat, &c. after each dose of the medicine, that she refused to continue it any longer. The bronchocele, in the mean time, was beginning to diminish sensibly.

The remainder of the cases contained in this memoir, are those of scrofulous affections cured by iodine, in conjunction with mercury. These we must pass over, as not presenting unequivocal proof of the particular efficacy of iodine, though we have no doubt that it is possessed of considerable power over scrofulous as well as other morbid swellings.

We now come to Dr. Zink's cases, where the hydriodate ointment was used.

Case 1. A young female child, five years of age, was brought to our author, with a white-swelling of the left ankle, which occasioned great pain when she attempted the least motion. The tumour did not surround the whole of the joint, being in two divisions, one at each malleolus. The skin had not changed colour, though it was tense, shining, and elastic. Wishing to ascertain precisely the effects of the iodine ointment, our author applied it night and morning to one side of the tumour. In the course of a month that part of the swelling had almost entirely disappeared, and was devoid of pain. The frictions were now only continued once a day, and in three months the swelling on the opposite side disappeared also.

Before proceeding to the second case, our author makes some observations on the internal use of iodine. He had an opportunity of seeing two fatal cases from the effects of this medicine, and of examining the bodies after death. The particulars are reserved for a future paper. In the mean time, he recommends the external use of the remedy, in preference, and we join him in this recommendation.

Case 2. An unmarried lady, 27 years of age, in good health, otherwise had, for a considerable time, a tumour in the right armpit, the size of an egg; apparently an enlarged lymphatic gland. It was indolent, hard, unequal, and moveable. Although not tender to the touch, it gave much inconvenience from its size, and by its pressure on the axillary nerves. Another indolent tumour was found situated two inches above the inner condyle of the humerus. The iodine ointment was commenced on the 25th January 1822, and continued till the beginning of April. The tumours were dissipated, but not without some suppuration taking place.

Case 3. A young lady had a hard, indolent tumour in one of her breasts, remaining after a contusion of the part, and now becoming painful. Leeches and cataplasms were first applied, and then the iodine ointment. The ointment did not appear to take any effect for some time on the mammary swelling, but, in a few days it completely dissipated a large goitre which she had on one side of her throat. Leeches, poultices, and gentle purgatives, now removed the tumour in the breast.

We have lately had a demonstrative proof of the efficacy of iodine ointment on an indolent and very hard tumour in the breast of a young lady, which had resisted every other means, and speedily gave way to two or three boxes of the ointment.

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2. *Dangers of Iodine.* A considerable number of practitioners in this metropolis have now exhibited iodine internally, and we have not been able to learn that any of them met with sinister accidents from its exhibition. Several of them have, in consequence, begun to doubt the fidelity of the statements which have reached us from the Continent, and have expressed themselves to be sceptical as to the reality of the dangers which we have more than once pointed out in this journal, founded on events which have occurred on this side of the Channel. It requires but a short retrospective glance at the history of active medicinal substances, to be convinced that, from some cause or other, their good effects are magnified, and their dangerous qualities concealed, at the beginning—and that a considerable period of trial is often necessary, to bring the merits and demerits of a remedy to the proper level of truth. Under this conviction, we shall go on with details of the success and danger of iodine, as they may reach us through public prints or private channels.

Dr. Miguel, Editor of the Gazette de Santé, relates the following case, which happened in his own practice.

Alexandrine C——, 17 years of age, had a large goitre, and was sent to the author for advice, by Dr. David of Meulan. At first the iodine ointment was tried, but without much sensible diminution of the tumour, Dr. Miguel then gave the patient some tincture of iodine, desiring her to take six drops three or four times a day, and not to exceed this quantity, without advice. She disregarded his injunctions, however, and not leaving her address, Dr. M. lost sight of her for nearly three months. He then received the following account from Dr. David, her original physician.

"Alexandrine, anxious to get rid of her goitre, exceeded your directions, and took the tincture in too large doses, without my consent. The consequence was, that the menses ceased, the pain in her stomach increased, and she was, at length, obliged to take to her bed, where she was found by the medical man of the house where she lodged, in a most deplorable condition. It was not till after some weeks that she was able to be moved, and came back under my care. Her complexion was now of a deadly pallid hue—her eyes without any other expression than that of severe suffer-

ing—voice nearly extinct—pulse scarcely to be felt, though incredibly quick—skin cold, but not dry—extreme prostration of strength—cephalalgia—entire loss of sleep—occasional delirium—constant spitting, amounting to a kind of salivation—small, dry cough—voracious craving for food and drink, which were rejected from the stomach as soon as swallowed—pain and extreme sensibility over the epigastric region—constipation—high-coloured urine—tension of the abdomen, &c."

These symptoms, clearly indicating irritation, if not chronic inflammation of the mucous membrane of the alimentary canal, demanded rigorous and abstemious regimen—leeches to the epigastrium—the tepid bath—emollient drinks, &c. By these means the gastro-intestinal irritation was gradually, though slowly, removed, and the patient restored to tolerable health. The volume of the goitre was reduced about one third, and rendered more soft.—*Gazette de Santé, Mars*, 1825.

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3. *Dysentery.* In hot climates dysentery often occurs in such an extremely acute form as to be justly considered a violent congestion or inflammation of the mucous membrane of the intestines, and in such instances, requiring the most decided depletion. Such was the dysentery described by Dr. O'Halloran in a late number of the Medical Repository, as occurring at Gibraltar among the young men of the 64th regiment. The patients had a constant inclination to stool, but only voided blood and mucus—the former frequently in great quantity. In three fourths of the cases, there was high febrile action—and many of them had great pain and difficulty in making water. This was a dangerous symptom. The mode of treatment adopted was simple, and appears to have been eminently successful. It consisted principally in early, copious, and repeated venesections, with the daily use of the sulphate of magnesia. From thirty-two to sixty-four ounces of blood were usually taken at the first bleeding. If faintness did not then ensue, the patient was raised, and the change of position generally induced syncope. The average quantity of blood drawn from dysenteric patients, in the course of the treatment, ranged from five to eight pounds—a quantity ordinarily taken away before the termination of the second day. Scybalæ were rare, either in spontaneous evacuations, or those produced by medicine. Sometimes, a typhoid fever succeeded the dysenteric symptoms. "For the removal of it, calomel and James's powder, five grains of the former to three of the latter, were given thrice a day, and the patients became convalescent in a short time, soon regaining strength."

Dr. O'Halloran must be aware, that the same plan of treatment was pursued in the army during the peninsular war; and that for 20 years past, bleeding has been employed in acute dysentery by our tropical practitioners.

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4. *Striking Cures.* All the world has now heard of the *striking* cures performed by Dr. Balfour of *percussive* celebrity. Gout and

rheumatism have been so *pummelled* by the Doctor, that they dare not show their faces in the intellectual city. In fact, he seems determined to *strike* them off the nosological list of his immortal countryman—Cullen. These formidable enemies being placed *hors de combat*, the Doctor has attacked a still more rebel class—the *neuroses*, which appear also to fly before his powerful hands. The 34th case lately published in the Medical and Physical Journal, affords a remarkable example of Dr. Balfour's success. The patient, an elderly lady, had the vapours in an extraordinary degree, being sometimes so oppressed in her spirits and feelings, "*that she could neither lie, sit, stand, speak, or listen to others!*" This being the case, we confess we are somewhat at a loss to imagine in what position the Doctor fixed his patient for the operations of percussion and compression—unless it was in that of flying or swimming. He did manage, however, to apply "percussion to the spine, shoulders, and superior extremities." "The effects were an improvement of feeling and a buoyancy of spirits, far exceeding her expectations." "I explained to her," says the Doctor, "the principles of my practice, *which she readily comprehended*, and considered the information as a most important acquisition." We hope Dr. Balfour's readers will comprehend his principles with the same facility as the old lady, who could "neither speak or listen to others," and that the information contained in this endless series of cases, will be considered by them also, as "a most important acquisition."

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5. *Poisoning by Opium.* Dr. John Crampton has published some cases of this kind in the 4th Volume of the Dublin Transactions. The two first cases were fatal, and need not be detailed. In the third, our author was more fortunate, and the success is ascribed to the plan first promulgated by Mr. Wray and Dr. Copland, viz. the affusion of cold water.

Case. In February 1823, Dr. C. was called to a lady who had swallowed about two ounces of laudanum, at 8 o'clock that morning, an hour and a half before his arrival. An apothecary had given her sulphate of zinc and chamomile tea, endeavouring to excite vomiting by a feather. Our author exhibited about two drachms of tartar emetic in divided doses, but without any effect. She evinced much propensity to sleep; and this was prevented by placing a cold wet cloth on the naked scalp, and by sprinkling cold water on the face, which seemed to rouse her sufficiently. She was next placed in an open carriage, her head freely exposed to the cold air, while aspersions of cold water were practised from time to time by her female attendants. This process our author superintended personally, and had the satisfaction to find that copious vomiting soon commenced. "The stomach, in fact, appeared to regain its natural susceptibility to emetics, under the joint influence of the cool air, the cold aspersion, and the motion of the carriage." In the course of an hour the patient was so far relieved that Dr. C. took his leave.

"In the event then of poisoning with opium, if the above views are correct, our practice should be, to use emetics without loss of time, shave our patients' heads, expose them freely to cold air, and make use of aspersions or affusions of cold water, availing ourselves of the advantage of exercise in some open vehicle. Mr. Jukes' improved tube and syringe, for emptying the stomach mechanically, might also be used with advantage, provided it was resorted to at an early period after the opium had been swallowed, and before the full narcotic influence of the poison had been exerted on the vital powers of the constitution." 302.

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6. *Pneumonia.** Dr. O'Halloran, the intrepid investigator of the Spanish and West-India fever, has given us an hospital report on Pneumonia, from the 64th regiment stationed at Gibraltar. His treatment of this disease was bold and decisive—and, as far as Europeans were concerned, remarkably successful. In all cases of this disease he very properly placed his chief reliance on the lancet for the removal of the local inflammation, aiding this powerful measure by purgatives, nauseating doses of antimonials, and the *warm bath*. This last however, was only used on the admission of patients and very rarely afterwards. If the symptoms were urgent and the patient young and robust, from 32 to 64 ounces of blood were abstracted at once, and if syncope did not take place in the recumbent posture, it was changed for the perpendicular, when fainting usually ensued. It was often necessary to repeat the operation a second, and sometimes a third time in the same day. After the first bleeding, ten, fifteen, or twenty grains of calomel combined with ten grains of extract of colocynth, were exhibited, and even this strong purgative often required salts to expedite its action. On the second day, if the distress of the lungs had not abated (and this was often the case) the bleeding was repeated, and tartarized antimony, in nauseating doses was given. Our author had rarely occasion to bleed on the third. The antimony was continued, and the patient usually was up by the fourth or fifth.

The above practice is not new in the Army and Navy, nor is it unknown to private practitioners. But it is rarely put in force by the latter. Perhaps it would not be either prudent or proper to carry measures with so high a hand in private life. Many objections would be made to it—and many impediments thrown in its way. On the other hand there are many auxiliaries to the above powerful measures that render it, in the majority of cases, unnecessary to push them to the extent described by O'Halloran. Add to this that, in private practice, we have more deteriorated constitutions and less simple form of disease to manage than among the class of patients under O'Halloran's care.† Under all these circumstances, the young practitioner will do well to

* Med. Repos. No. 8.

† "The regiment is principally composed of young men, from seventeen to thirty years of age."—*O'Halloran.*

view the above plan of treatment as one which may *occasionally* be adopted among the young and vigorous of his patients, but not put commonly into use among the general run of constitutions.

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7. *Diabetes.** We suspect, with Dr. Sharkey, that we have been a little out of our reckoning, of late years, respecting the diet of diabetic patients. Animal food, we much fear, has no very great effect in checking this formidable disease, even when rigidly adhered to. But the fact is, that few or no patients will confine themselves to a strict diet of animal matters. We were lately in attendance on two diabetic patients where the animal food system was pursued for some time, without the least advantage. Both patients got tired of this system, and indulged freely in vegetables without any increase, but rather a decrease of the diabetic urine. The compound powder of ipecacuan and superacetate of lead gave most relief. They ultimately relaxed the skin and checked the inordinate secretion of saccharine water.

Dr. Sharkey met with two cases of diabetes mellitus in the years 1812-13, where the treatment of Rollo was first used without advantage, and where a different treatment succeeded. The treatment may be described in a few words, as it consisted principally in the administration of phosphate of soda—a remedy which the elder Dr. Latham, indeed, had used in similiar cases before, but only as a subordinate auxiliary. Dr. S. was led by accident to the employment of this medicine, from observing a remarkable diminution of urine after taking a dose of the salt as a common purgative.

In one of these cases we perceive Dr. S. used previously the superacetate of lead and opium, employing the phosphate of soda to counteract constipation at first. Under these circumstances, a doubt may arise whether the cure was attributable solely to the phosphate. Dr. S. also gave with it the decoction of cinchona. The dose was generally a drachm of the phosphate thrice a day. In the second case, however, he informs us that the phosphate of soda *alone* was employed, and "the disease terminated favourably in a short time."

In a complaint which so frequently baffles every medicine, the foregoing hints may be acceptable.

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8. *Sulphate of Quinine.*† The success of sulphate of quinine in intermittent fevers naturally leads to a confident expectation that its powers will be extended to many other diseases—and that its *febrifuge* qualities may not be confined to a single class of fevers.

* P. Sharkey, A. M. M. D. Physician to the Cork General Dispensary. Dublin Transactions, vol. iv. p. 379, *et seq.*

† On the Effects of Sulphate of Quina in Typhus. By John O'Brien, M. D.&c. Fellow of the King and Queen's College of Physicians in Ireland. *Dublin Transactions, vol.* iv. p. 367—378.

The minuteness of its dose, the facility of its exhibition, the convenience of its form, and its levity on the stomach, seem to promise an agent possessing all the virtues, and few or none of the inconveniences of the Peruvian bark.

In conformity with these views, Dr. O'Brien felt it his duty to give the medicine a trial in a few cases of typhus. The results have impressed him with a very favourable opinion of its efficacy, under certain restrictions, in this class of fevers.

In the months of October and November 1823, a great influx of fever cases took place into the Fever Hospital, Cork Street, of rather a malignant type.

"This fever was in general characterized by large petechiæ, of a dark bluish colour, in the form of maculæ or blotches, variegating the whole surface of the body in a very singular manner.—Four individuals of a family, named M'Gowan, in different wards of the hospital, exhibited a skin covered from head to foot precisely in the same manner with the petechiæ just described. The fever seldom terminated before the fourteenth or fifteenth days, but was frequently protracted to the twentieth and twenty-first.—The organs principally affected were the brain and nervous system, evinced by delirium in all its degrees, muscular tremors, subsultus tendinum, &c. pulmonary congestion or inflammation were also frequent. In the most malignant and fatal cases, both the head and chest jointly exhibited the usual marks of congestion, or inflammatory action; a combination of symptoms to which the petechiæ above-mentioned were generally superadded. From the class of cases just described, six were selected indiscriminately, for trying the effects of the sulphate of quina." 369.

In two cases, the effect was as decisive, and the recovery as rapid, as in intermittent fever. In three cases, the result was less rapid, but not less effectual.—The patients improved gradually, and ultimately recovered without relapse. One patient out of the six died. On an impartial review of this last case, our author cannot consider it as a decisive instance of failure in respect to the medicine.

"It presented a specimen of that intense and complicated form of typhus, the most formidable we encounter in our hospital, in which there exists a constant tendency to inflammation or congestion simultaneously in several organs essential to life, but principally in the brain and lungs, whilst the failure of the strength and vital powers forbids those measures of depletion necessary to restore the balance of the circulation." 371.

In most instances of this kind, there exists a predisposition in the organs, probably some structural lesion, which leads to inflammation or congestion, during the orgasm of fever. This appears to have been the case of the patient who died.

"On his first admission, which took place about the fifth day of this fever, as well as I could learn, the prominent symptoms which presented themselves, were those of mild pneumonic typhus, (pneu-

monia typhodes of Dr. Cullen,) viz. a quick and rather feeble pulse, dull pain and oppression of chest, accompanied by a wheezing respiration, foul tongue, and clouded skin; but no petechiæ appeared till a more advanced stage of the disease." 371.

The local affections were treated in a judicious manner, and, on the 13th day of fever, the sulphate of quina was commenced, with the view of giving tone to the vascular system, and counteracting its approaching collapse. It was continued four days, in doses of four grains per diem. The first effects observed were highly favourable. The pulse became slower and firmer—the countenance exhibited more energy—the petechiæ became more full and florid—and the tongue became clean and moist. This favourable state of things was not permanent. On the 17th day, the respiration became laborious and sonorous. The quina was discontinued, and cordials and stimulants employed. Death took place on the 21st day. This case certainly affords no evidence unfavourable to the sulphate. Indeed, it is doubtful, as Dr. O'Brien observes, whether the event might not have been more fortunate, had the quinine been persevered in. We see no possible reason for substituting *cordials and stimulants* for the quinine. The *latter* medicine was the best cordial and stimulant they could have given—and if *it* was improper, so must have been those medicines subsequently exhibited.

The two patients who had rapid recoveries, were both affected with "fever of a severe and dangerous character"—both having petechiæ and blackness of the tongue. There were no appearances of a remittent type in either case. Both patients were of a thin and delicate frame, and a weak and flaccid muscular fibre—circumstances unquestionably favourable to the quinine.

Every one knows that the bark used formerly to be given in typhus, as well as in every other kind of fever. We are informed by Morton, that one of the arguments urged by the opposers of this medicine, was, that its introduction must destroy altogether the profession of physic, as every man would then enjoy health without the aid of the Doctor! An argument founded on such ignorance and self-interestedness, would excite no small degree of surprise in these days. It is, therefore, to be hoped, that we are both wiser, and more liberal than were our forefathers one or two centuries ago.

The failure, and consequent disuse of bark, doubtless arose, as Dr. O'Brien observes, from the indiscriminate and injudicious manner in which it was administered, as well as from the inconvenience of its bulk. Indeed, this last disadvantage renders bark inadmissible in the great majority of continued fevers, where nausea and irritability of stomach so generally prevail. From this drawback, the quinine is altogether free, as it very rarely disagrees with the stomach.

Dr. O'Brien infers, from the foregoing cases, that three or four grains *per diem* will be generally sufficient to insure the success of the remedy—and perhaps even smaller doses.

"With respect to the stage of fever most appropriate for commencing the quina, the period of direct debility or collapse ap-

pears to me the most suitable. In the stage of excitement it must be remembered, that one or more organs are found to labour under inflammation or congestion; and the stomach, participating in the general disturbance of the nervous and vascular systems, is weak and irritable. To such a state of things the quina is inapplicable. If administered under such circumstances, its effects will be, to augment the heat of the skin, parch the mouth and embrown the tongue, promote costiveness, and increase the errors of the circulation. When the period of excitement has passed away, the temperature of skin fallen, and the circulation in some degree restored to an equal balance, we may safely commence the quina. The moment, in fine, when the cordial treatment becomes necessary, seems to be the most proper for calling to our aid the tonic powers of the quina. In fever of a remittent type, I apprehend less caution may be necessary." 377.

We are convinced, as we stated in a former number, that the sulphate of quinine will soon become applicable to a great many complaints where no form of bark is now considered admissible.

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9. *Hospital Reports, from La Charité under Professor Laennec, for the first quarter of* 1824. (Revue Medicale, Mai, 1824.)

This report is made out by Meriadec Laennec, "Aide de Clinique," and the son, we suppose, of the celebrated Professor. The entries were 222 cases, of which one hundred and twelve were acute diseases—eighty-six were chronic maladies—and twenty-two valetudinarians.

The acute diseases were fevers, the various phlegmasiæ—exanthemata—rheumatisms, &c. More than half the cases of fever were mild, and occasioned little alarm. Four died out of 36—or one in nine. This, we think, is a pretty high ratio of mortality, considering that there was no epidemic, and so large a proportion of mild cases. Three of the four who died were young men, and the fourth a boy of 15 years of age. All the fever cases were treated "*par la methode expectante.*" A few leeches were applied in the beginning, when there existed any signs of gastro-intestinal irritation or cerebral congestions, with diluents, and rigid regimen during the acute stage of the disease. We have given, in the first article of this Number, M. Laennec's ideas respecting the connexion of fever and inflammation—and need only say here that he considers the disease as no way dependent essentially on local inflammation; for, when the latter exists, the fever is symptomatic—in short, that inflammation is a mere contingency that may or may not take place in the course of idiopathic fever. Of the contingent inflammations he has found those of the thorax the most frequent. The sanguineous *congestions* which we observe in dead bodies, take place, he thinks, for the most part, during the agonies, or even *after* death. He thinks that medicine has little control over the march or duration of fever—although it has often the power of combating the contingent phlogoses, and thus saving the life of the patient.

Of intermittents, two cases only occurred, and were cured by the

sulphate of quinine, in doses of 18 grains in 24 hours. Of five apoplectic attacks, three died, and two remain hemiplegiac.

There were 28 cases of pleurisy, peripneumony, and pleuro-pneumony. Peripneumony was recognised, in every instance, from the very beginning, by means of the stethoscope. Only one died, although, in several of the patients, the lungs of both sides were affected. In two cases there was a total absence of the respiratory murmur throughout one whole lung, and half the other—so that three-fourths of the pulmonary apparatus had become hepatized.* Five or six showed unequivocal signs of pulmonary abscess. Under these circumstances the loss of only one in the 28 cases speaks for the merits of the method of treatment. This method was by large doses of the tartrite of antimony, as we have already made known in a former Number of this Journal. "In one patient, who was very weakly, the pectoriloquism and cavernous rattle (râle caverneux) indicated the existence of two abscesses in the right lung. The emetic tartar was given in large doses (nine grains in the day) and was well borne. The inflammatory orgasm was arrested. The dose was carried, in another case, to 12 grains, and afterwards to fifteen in the 24 hours. Both patients became rapidly convalescent." There were five cases of acute articular rheumatism, which all gave way to antimonials administered in large doses.

Among the cases of phthisis which showed unequivocal evidence (by the stethoscope) of pectoriloquism, or tubercular excavations, this symptom became stationary in three cases—the patients gathered flesh and strength, coughing and spitting very little. M. Laennec regarded these as instances of cured phthisis—but thinks that at some future day, fresh tubercles will suppurate and destroy their lives. Phthisis is so easily ascertained by the stethoscope, that the pupils themselves, in a very little time, had no difficulty in recognising it. Even crude tubercles, and in no great number, were often detected by mediate auscultation.

Eight cases of disease of the heart presented themselves this quarter, of whom three died—all with hypertrophy. One very old man was *in extremis*, when he entered the hospital, and the disease was evident. But the extent of the hypertrophy was not suspected even by Laennec with the stethoscope in his hand. The heart was nearly as large as the man's own head—while the sound and impulsion, during life, were not at all in proportion to this astonishing magnitude. In the cases of those who have yet survived, the abstemious and depletory plan of Valsalva had some effect in mitigating the symptoms. One young man, 18 years of age, had been affected with slight acute rheumatism, which gave way in a few days to tartarized antimony; (six grains in the 24 hours.) On the 5th day of convalescence, he showed some symptoms of very slight pleuro-pneumony, and M. Laennec accidentally examined the chest with the stethoscope, when, to his surprise, he

*Does M. Laennec mean to say that *these* recovered! They might not die within the date of the report, but we believe it to be absolutely impossible for a hepatized lung to recover its pristine organization, or for a patient with such disease to completely recover health.—*Rev.*

found the action of the heart extremely violent, and he had no hesitation in pronouncing the melancholy fiat—hypertrophy of the heart. Yet, in this case, there had been no disturbance of the circulation or respiration, or any symptom that could authorize the suspicion of disease of the heart going forward. The pulmonic inflammation yielded to two bleedings, the application of leeches, and the use of antimonial powder, 36 grains *per diem*. But the general signs of hypertrophy of the heart developed themselves daily more and more. Latterly the contractions of the heart are become tumultuous, accompanied by an obtuse pain in the cardiac region, where the sound has become dull and almost inaudible —signs which seem to announce the existence of pericarditis. Finally, this patient presents a hissing noise in all the arteries of the body—a phenomenon which M. Laennec considers as no proof whatever of disease in any of the arteries. At the same time, when it obtains in many arteries at once, it is a symptom of danger.

Seven cases of peritonitis, chronic or subacute, occurred, of which four were completely cured by mercurial frictions. "The moment the mouth became affected the peritoneal inflammation ceased." "Dans les quatre cas indiqués, ce traitement a été tres efficace, *et des les premiers signes de salivation, les symptomes de peritonite ont constamment disparue.*" This will set the hair of the whole French faculty on end. Mercury to cure a chronic inflammation! They will not believe it, even from the mouth of Laennec. He took the idea from Mynheer Vandinzande of Antwerp, but it is evident enough that the practice has been long familiar to English physicians.

Seven cases of sciatica occurred, and were all cured by the plan long ago recommended by Cotugno—viz. blisters kept open for several weeks, not near the origin, or in the course of the sciatic nerve, but as near as possible to the extremities of the nerve. Thus, a blister below the head of the fibula (dessous de la tête du peroné) or on the instep, and kept open for some time, will often cure a sciatica that has resisted repeated blisters higher up. The suppuration of the blister should be maintained for six weeks at least. For twenty years past M. Laennec has never known this treatment fail. There was a curious case where a continued pain emerged from the last dorsal and first lumbar vertebræ, terminating in the linea alba. Considering the affection as neuralgia of the inferior dorsal and upper lumbar nerves, M. Laennec applied a long blister on each side of the linea alba, and kept it open for five weeks, when the patient was completely cured. This hint is worth attending to in other neuralgiæ.

In two cases of incomplete amaurosis, the ammoniacal pomatum of Gondret was employed with success, by being applied to various points of the vertex.

We shall be happy to see a continuation of these Hospital Reports from so excellent a pathologist as M. Laennec.

V

Midwifery.

1. *Puerperal Fever.** Dr. Payne publishes this case of puerperal fever, "with the view of establishing a different method of treating that disease, from that which, it appears, is still pursued by many practitioners, both in Edinburgh and London," viz. by blood-letting. The *object* of this paper is therefore highly important, and we esteem it our bounden duty, to enter as fully into the question as its importance demands.

Certainly, in order that the case given may illustrate and "*establish*" the proper treatment, it must be an unequivocal and undoubted instance of the disease in question. This is the first point to be established—then we may proceed to the merits of the remedy. Unhappily, however, for the reputation of the turpentine, we greatly fear that the disease which it cured, in this instance, was *not* the disease it was intended and supposed to cure.

The scope of our remarks will, hence, be mainly to point out the grounds on which we found our opinion of an error in the diagnosis. In doing this, we shall first endeavour to show, that the symptom on which Dr. Payne depends for his diagnosis, is not pathognomonic of the disease. Secondly, that there are symptoms noticed as occurring in this case, which denote a different disease; and, thirdly, that the mode of treatment was such as no practitioner would venture to confide in for the removal of an active internal inflammation, under any circumstances.

Dr. Payne *first* imagined the case of his patient *not* to be puerperal fever, *because* it was not "preceded by rigor; then that, it *would* prove to be puerperal fever, or "peritoneal inflammation," because severe rigor at length occurred. Now it is scarcely possible that *both* these modes of thinking can be just, in their application to the *self-same case*, and on the *self-same day;* and we must either conclude that inflammation did already exist, although rigor had not yet occurred, or that, even after the rigor, there was not inflammation; for it must be observed, that the case was not one of insidious character, but one of the most acute and urgent kind.

Thus admitting for a moment that the case was puerperal fever, it is plain that, contrary to Dr. Payne's experience and axiom, it was NOT *preceded by rigor*. We now proceed to show that the symptoms of the disease were such, from the very commencement, as denote intestinal irritation, and not inflammation. But, as we must be as brief as possible, we shall merely copy the account of the symptoms given in the commencement of the case, "there were," then, "much headach, urgent thirst, intolerance of light, and great disturbance produced by the slighest noise." Now these are precisely the symptoms which arise from intestinal irritation.

*Case of Puerperal Fever, successfully treated by Oil of Turpentine. By Henry Payne, M. D. *Ed. Med. Journal, for July* 1824, *p.* 53.

and which are, to say the least, by no means essential to inflammation, if, indeed, they were *ever* observed in a case of *pure* inflammation.

Then, in the third place, the case was *severe*, and yet ceased *without the use of the lancet*. Now, has any one ever known inflammation of the peritoneum, in its severer form, trusted to any remedy but the lancet? has any other violent internal inflammation ever been trusted to any other remedy than the lancet? and would any one, in the present state of our knowledge, ever have the hardihood to trust puerperal or any other *active internal inflammation* to any other remedy? We answer, undoubtingly and unhesitatingly, No.—If such disease were to yield, the fact must be learnt by *accident*, not by *design*; for we imagine that no one will dare to try the experiment.

Dr. Payne's case is, however, a very instructive one, and would have been truly valuable, had it been given with the view, not of establishing a different mode of the treatment of puerperal fever, but of illustrating the effects of intestinal irritation; and whilst we earnestly beg of our junior readers, not to be misled by it into the neglect of the lancet in actual inflammation, we recommend it to their attentive perusal, as a good and fair example of that other disease. And we would especially notice an occurrence on the 5th day. Dr. Payne observes, "on my return from a ride into the country, I learnt that a messenger had called, requesting my attendance as soon as possible. I understood there had been considerable pain of the head, and some tendency to delirium." On the preceding evening, the patient had indulged too freely in conversation on a distressing subject; and the previous night had not been very good. Dr. Payne proceeds, "as the abdominal pain was entirely removed, some practitioners, on seeing approach the tendency to delirium, might suppose there was going to take place a metastasis to the brain." Dr. Payne was not however deceived in this matter: and although we cannot approve of his mode of reasoning, or of his sweeping dogma relative to the catholicon power of his favourite remedy, we wish to do him the justice of observing, that we believe he was quite correct in his distinction of the *symptoms* and *appearance* of affection of the head from real phrenitis;—but being in the habit," he adds, "of seeing my puerperal patients recover under the use of turpentine, I felt confident that the unpleasant symptoms would quickly be removed by the application of cold to the forehead." The whole case is interesting, when viewed as one of intestinal irritation, or perhaps, indeed, as an illustration of the utility of the turpentine in this particular kind of puerperal disease, and we think it altogether very well and accurately given.

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2. *Puerperal Fever.** We are at a loss to imagine the author's object in the publication of this case, which we notice for two reasons,—*first*, to point out the vague and unsatisfactory manner in which

* Case by H. Saunders, Surgeon. Med. and Phys. Journal, No. 30, for September, p. 214.

cases are apt to be given to the public, now-a-days ;—for instance —" Tuesday, had passed urine freely, and without pain ; after-pains trifling, lochia natural. Wednesday, the abdomen has become tense and swollen. The pain previously complained of, has returned with increased violence ; can only lie on the right side. *Neither the pulse nor tongue indicated the presence of active inflammation.* Salines, with Dover's powder, were prescribed, with a saline cathartic. Thursday, pain somewhat increased on pressure, and *the symptoms more inflammatory*," &c. &c. Now on the Wednesday, the symptoms were *not* inflammatory at all ; on the Thursday, they were *more* inflammatory. But we do not intend merely to object to the *verbal* inaccuracy of this narration ; for we should be contented had we only substantial *facts*, however faulty the phraseology ; but we should have been glad to know *why* there were *no* inflammatory symptoms on Wednesday, and more on Thursday ; or, rather, why the author concluded it so to be. It ought to have been his object in *publishing* his case, to have satisfied *us ;* as it is destitute of all *detail* of symptoms, and, consequently of all evidence for the author's opinion, it is not, as a published case, worth one farthing. But, *secondly*, the case is really useful, as exemplifying one particular fact, which we have very frequently noticed, viz. that *there may be severe rigor in puerperal cases, without any serious consequence.* Thus—" Tuesday. Was sent for in great haste, supposing my patient was *in articulo mortis.* On arriving, *she had just recovered from a severe rigor :* though excessively low and dejected, her countenance had assumed a more favourable aspect ; she had had some refreshing sleep ; her pulse about 120, and more regular ; her thirst had diminished ; tongue cleaner, and less dry ; could bear pressure better, and had been lying on the right side for three hours. The blister had risen well, and the pain in the thigh had nearly abated. I continued the diaphoretic saline, applied a second blister to the sacrum, and allowed her a more generous diet.—Wednesday. Her bowels costive ; had not acted since Tuesday forenoon. Ordered a common cathartic enema.—Thursday. Much better in general, though the pain had a little increased. The bowels had twice freely acted, from the injection. I applied six leeches to the groins, and continued the saline. From this time, my patient became gradually convalescent." Now it is by no means our intention to inculcate the doctrine, that rigor does not require the strictest attention and subsequent watching ; for this it certainly *does* require ; but we wish to impress upon our readers the fact, for such we assuredly know it to be, that rigor, in the course of a puerperal affection, does not *always* indicate the occurrence of inflammation, or suppuration ; but that it is sometimes induced by other causes, and especially we believe, by that state of the bowels, and of the system at large, which precedes, attends, or follows the action of purgative medicine : still, however, let us *watch* carefully after rigor,—but with *two* objects in view, viz. to detect early the *first* or *second* of these events, and to discriminate between them and the *third.*

VI.

MEDICAL JURISPRUDENCE.

*Medical Remuneration.** In the 15th Number of our last series (vol. iv. p. 545, *et seq.*) we took an opportunity of making some remarks on the degrading *mode* in which the general practitioner is remunerated for his professional services. We objected to the plan proposed by Mr. Alcock—that of charging for the *advice* and giving the *remedy* gratis, as being likely to occasion still more dissatisfaction to the patient than the present mode, bad as this is.—Mr. Greenhow is of the same opinion with ourselves, on this point. There is, unfortunately no plan which is free from objections. The most respectable plan would be to separate the dispensing of medicine from professional advice or chirurgical aid; but in any but large towns, we fear this is impracticable; and would, at all events, diminish the present revenue of the general practitioner (which is quite little enough) and throw the difference into the pockets of the chymists and druggists, who have already more than their share of pharmaceutical profits. The plan of prescribing without dispensing then must, we think, be abandoned for the present at least. The next most respectable plan (and we know that it is perfectly practicable) is to charge for attendance, and send in as little medicine as possible—and that at the same rate as the medicine procured at the chemists' shops. This measure, we have no doubt, might be effected by any individual, whether his brethren of the same town co-operated or not—for we have known it to be put in practice with perfect success. But unquestionably it would be far better for general practitioners to call meetings and bind themselves by solemn compact to pursue the plan unanimously, and then the public neither could nor would object. The example should be set in the metropolis and large towns. It is most degrading to send to patients, at the end of the year, a long bill, like that of a tailor or tallow-chandler. No item should ever be stated—except the two heads of medicine, and professional attendance. If, as might happen on some rare occasions, the patient demanded a sight of the separate debits, he should be shown the surgeon's ledger—but we repeat it, no bill of parcels should ever be made out. This, we imagine, (and not without mature consideration) is the only amelioration of which the *mode* of remunerating the general practitioner is at present susceptible. But this *improvement* would be one of incalculable advantage to both patient and practitioner. Without altering the sum total of expense attending an illness, it would save the patient many a nauseous draught, and prevent many a *bitter* reflection on the rising pile of empty phials which so often forms an eye-sore to the sick man in one corner of his room. It would shelter the practitioner from many illiberal suspicions respecting the *motive* of

* Hints towards the adoption of an improved principle of remunerating the Surgeon-Apothecary. By T. M. Greenhow, Surgeon. 8vo. pp. 26.

sending in so much medicine—and it would probably save him many unnecessary and fatiguing visits, when it was known that the visits would be charged to the patient's account. These are only a very few of the advantages attending the plan recommended.—There are objections to the present *mode* of remuneration, which we touch upon with reluctance, and not without some degree of horror. We much fear that many *lives* annually fall a sacrifice to this degrading and mischievous system. Numerous facts have fallen within our own notice, which indeed, leave no doubt in our own minds on the subject. Many patients tamper with their complaints, or apply to the chymist, for fear of the apothecary's long bill and load of medicines, till the disease acquires a foundation that cannot afterwards be shaken by the most consummate skill.—Many other patients deceive themselves and their medical attendants by throwing one half of the medicine into the fire; and thus plans of treatment are rendered abortive that were laid with judgment. And who will aver, that many stomachs are not rendered incapable of retaining and assimilating a *proper quantum* of medicinal agents, by the improper or unnecessary quantum of menstruum in which they are ordered to be swallowed? Every medical man, who has had the misfortune to be confined on the bed of sickness, himself, will be able to answer this question.—For our own parts, we are thoroughly convinced that many lives are daily lost in this way by the unhallowed mode of medical remuneration at present in use!

We object to Mr. Alcock's proposal that the general practitioner's fee, whatever it may be, should be paid at each visit. The fee must necessarily be so small (for we do not think it can average more than five shillings, and often less) that there would be something ludicrous as well as inconvenient in this procedure. The scheme proposed by the author before us is rather more feasible, but still, we think, objectionable—that of the practitioner receiving his fees whenever they amounted to a guinea. Even this plan would be too complicated for general practice. Mr. Greenhow's proposals, however, shall be given in his own words.

"1st. That the general practitioners in every town should hold meetings among themselves for the purpose of deciding on what they may consider an equitable scale of fees, both for their visits in town and in the country—the latter being regulated according to the distance. And that they should also form a table of prices for their medicines, on such terms as would no more than suffice to remunerate them for the expence of supplying them to their patients. But as it would be only fair that, in case of their being required to prepare prescriptions for patients whom they might not themselves professionally visit, they should derive an adequate profit from the stock so employed, a second table of prices, regulated accordingly, would be required for such occasions.

"2d. That having formed resolutions agreeable to the preceding proposition, they should then call a general public meeting to ratify their proceedings, that the adoption of the improved system might become the joint act of the Public and of the Profession.

A clear and candid statement of their views should be laid before that meeting, and it should be their endeavour to convince those present of the justice and reasonableness of the reform which it is intended to bring about.

The writer is sanguine enough to believe that a simultaneous movement amongst the Members of the Profession in every part of England, in the way above described, would not fail to be attended with all the success which the importance of the object deserves. He has only further to remark, that were the Members of the Profession in different towns to communicate freely with each other on the subject, it might lead to the very desirable result of establishing a scale of charges and of fees, uniform and well understood throughout the kingdom." 26.

With the exception already stated, we entirely agree with Mr. Greenhow—and we earnestly exhort the general practitioners of the metropolis to set about the work of reformation, by calling a general meeting—adopting such plans as their wisdom may suggest—and then making these plans and the reasons for their adoption extensively known throughout society at large through the medium of the press.

IX.

ANALECTA MINORA.

OR

LITTLE PERISCOPE.

——————— sparsa Colligens.

1. *Preservation of Dead Subjects.* Mr. Amesbury informs the Editor of the Medical Repository, that he has derived great advantage in the preservation of subjects for dissection, by using a mixture of the nitrate of potass and muriate of soda, in the proportion of one-fourth of the former to three-fourths of the latter. In the winter season, he has preserved subjects so well by the use of these salts that, at the expiration of six months, they were in nearly as good a state for dissection as when they first came into his possession. He uses about one pound of the mixed salts for every fifteen pounds of the subject to be preserved. His method is, to rub the salts upon the integuments at three or four times, at intervals of two days, and to throw a handful into the cavities of the thorax and abdomen, when he wishes to preserve the viscera. To prevent certain parts, as the fingers, toes, and places where the cuticle is abraded, from getting dry and withering, he wraps them in cloths wetted with a solution of the salts in water.

2. *Emplasto-dermic Treatment of Diseases.* Two hospital students of

Paris,* have been making experiments on the introduction of various medicinal substances into the constitution, through the medium of the abraded surfaces of blisters, and other sores. In this way, it is desirable, of course, to act with substances that evince great power in a small volume. The authors of these experiments aver, that they have ascertained the *doses* of many of the principal active remedies administered according to this method. When the substances are too irritating, they incorporate them with cerates or jellies—if, on the other hand, they have a tendency to dry up the sore to which they are applied, they are to be mixed with some blistering ointment.

In this way, they have calmed to sleep a considerable number of sleepless patients by the external use of acetate of morphium, as also, eased the pains of rheumatism—cured chronic catarrhs, &c. By the external application of the sulphate of quinine, they say they have stopped both tertian and quartan intermittents that resisted this powerful remedy, when taken internally. In a case of neuralgia of the temple, complicated with hysteria, the acetate of morphium and assafœtida, externally applied, effected a cure, when other remedies had failed. But the most remarkable circumstance, was a case of tetanus, produced by the external application of nux vomica to a blistered surface, and cured almost instantaneously by substituting acetate of morphium for the nux vomica. Musk, digitalis, tartar emetic, purgatives, diuretics, sudorifics, &c. have been employed in the *emplastodermic* manner, with (it is said) the most satisfactory results.—*Gazette de Santé, 5 Juillet.*

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3. *Contagious Glanders in Horses.* It is said that Mr. Sewel, the very able Assistant Professor of the Veterinary College, and celebrated Neurotomist, has been so fortunate as to discover a remedy for the abovementioned malady, hitherto considered incurable. It is sulphate of copper, given in bolus or ball, in doses of from one to two ounces daily, for several weeks. —*Philosoph. Mag.*

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4. M. Liaubon has ascertained, (as is stated in several of the foreign journals) that a cancerous sore, if washed with an aqueous solution of common culinary salt, soon ceases to emit that peculiarly disagreeable fœtor so characteristic of this horrible disease.

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5. *Non-union of Fractures.* Mr. Amesbury has recently detailed some cases in the Medical Repository, which illustrate the beneficial influence of pressure in uniting fractures which have failed in ossific union in the first instance. This pressure is made by means of a mechanical apparatus, which has already been described in this Journal, and which promises to be of essential service in these unfortunate accidents.

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6. *Substitute for Castor Oil*: by C. G. Hufeland. Dr. Hufeland states that by mixing one drop of oil of croton with an ounce of oil of poppy, a preparation is obtained which greatly resembles castor oil, in its purgative effects. A table-spoonful is an ordinary dose, and equal to the same quantity of the more expensive preparation. A great number of experiments were tried to this effect, at the Polyclinic Institution of Berlin.

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7. *Congestive Fever in the Sea.* In a most notable piece of medical topography, written by the Chevalier Isoard, and published in the Medical Repository for September last, we find the following philosophic observations.

* Messrs. Lembert and Lesieur.

"The view of the sea, observed from the town of Grégoi, presents a phenomenon very worthy of attention, and which, perhaps, may have some influence *in the development of the disease which is about to engage our attention.* The waters of the sea seem elevated and suspended above the land, which may be said to be menaced with an inevitable inundation. The ships at anchor off the bar seem hovering in the air, and at a great height above the plane of the coast; and the spectator is seized with wonder and astonishment at the sight of this mass of water, which seems to be arrested by a bank, considerably beneath its level. Ought this phenomenon to be attributed to mirage, *or are the waters really elevated towards the equator, and kept in their state of congestion by particular laws?*" 190.

The therapeutics of the Chevalier are in accordance with his medical topography. On the first day of African fever, a pediluvium—a ptisan—a grain of emetic tartar. 2d day, a pediluvium—dilute hydrochloric acid for drink. 3d day, cream of tartar. 4th day, ditto repeated. When a remission takes place, (if it ever take place) then bark. But of this enough!

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8. *Preservation of the Stomach by Poison.* A man of the name of Patect was executed for murder in the Pays Bas, on the 27th of August last. Before punishment, he confessed that he was privy to the crime of poisoning, committed on his uncle by the surviving widow. The uncle had died on the 28th May of the year preceding—the body having been buried nearly sixteen months. Exhumation was ordered, and, notwithstanding the putrefaction of the whole of the body, the stomach was in such a state of preservation that the poisonous substance was detected in it. The journal in which this information is contained, does not give any farther particulars; but there can be little doubt, that the preservation of the stomach was owing to the poisonous substance, (most probably a mineral one,) contained in it. The chlorures, for example, have great power in preserving animal substances from putrefaction.—*Gazette de Santé.*

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9. *Pathology of a Pinch of Snuff.** Who will now complain that the French outstrip us in minute pathology? Dr. Kinglake has rescued the profession on this side of the Channel from the obloquy which has sometimes been thrown on them in this respect. He has dissected a pinch of snuff most minutely, and proved, beyond all cavil or doubt, that—"the practice of snuff-taking is, *perhaps*, the most baneful that popular custom and familiarity have sanctioned as innoxious and gratifying." Dr. Kinglake has discovered, that this deadly narcotic poison is carried into the stomach "by the act of strong *inhalation* through the nostrils," where it must produce the same effects as henbane, wolfsbane, deadly nightshade, laurel, &c. only in a slow and insidious manner. "Loss of appetite," says Dr. K. "distressing sickness, gastric oppression, præcordial anxiety, acetous fermentation, flatulent distention, and deadly languor, are amongst the direct effects of admitting snuff into the stomach. And again, he exclaims—"What vital function can preserve its healthy state amidst such overwhelming affection of gastric excitability?" We answer—none, none! Dr. Kinglake's reasoning is demonstration itself; and although we see none of the effects above described among our snuff-taking neighbours, we most willingly grant, that they *ought to take place*, according to the best systems of pharmacology—and it is a vile shame that they *do not* take place accordingly. Whether it is that this deadly narcotic does not find its way,

* Dr. Kinglake. Med. and Phys. Journ. December.

by *inhalation*, into the stomach—or that, like some other substances, (as ipecacuan for instance,) its effects, in minute doses, are totally different from those that result from large ones—but so it is, that the snuff-takers of our acquaintance, eat, drink, and sleep, like other people—and, which is the *argumentum ad hominem*, consult us more frequently for gastric affections, than those who never inhale a pinch of Fribourg or Lundifoot from June till January. This, we allow, is not as it *ought to be*.—But Dr. Kinglake may console himself with the reflection, that Sir Joseph Bankes experienced the same disappointment, when he boiled the fleas, and found that they did not (as they *ought*) turn red like lobsters.*

10. *Elements of Phrenology*: by George Combe, President of the Phrenological Society. Mr. George Combe, the well known Phrenologist of Scotland, has just published a duodecimo, entitled "Elements of Phrenology." As far as we can judge, it presents an agreeable epitome of the science, and we recommend it to those who are desirous of knowing what phrenology means without bestowing any time upon the inquiry. The disinterested ardour of the phrenologist is strikingly shown in the price of the work, for this is so low, that it is impossible for the author to be more than reimbursed should the whole impression be sold, as it undoubtedly will.

XV.

BIBLIOGRAPHICAL RECORD;

OR,

Works received for Review since last Quarter.

1. Essays on Various Subjects of Medical Science. By DAVID HOSACK, M.D. F.R.S. L. & E. &c. &c. 2 vols. 8vo. pp. 472. New York, 1824.

☞ See this Number of our Review.

2. Practical Observations on the Lateral Operation of Lithotomy; and on various improved and new modes of performing this operation; together with remarks on the Recto-Vesical Operation. By ROBERT MUTER, M.D. Member of the Royal College of Surgeons in London, Author of "Observations on Various Novel Modes of operating on Cataract," &c. 8vo. pp. 107. New York, 1824.

3. Practical Observations on Hydrophobia, with a Review of the Remedies employed, and Suggestions for a different Treatment of that Disease. By JOHN BOOTH, M.D. &c. &c. &c. 8vo. stitched. pp. 16. London, 1824.

* "Fleas are not lobsters, d——n their souls."—*Peter Pindar.*

4. Inaugural Address delivered before the Medical Society of the County of New York, on the 12th day of July, 1824. By DAVID HOSACK, M.D. LL.D. President of the Society.

☞ Dr. Hosack reviews, with equal ability and earnestness, the great objects of the Society,—the encouragement and cultivation of good Medical Ethics—the discouragement of every thing savouring of Charlatanry—the prosecution of Medical and Chirurgical Science—and last, not least, a pious regard to the Memory of their departed brethren, as manifested in Biographical Records of their virtues and good deeds. This is all done in a tone of the very best feeling, and it must have made an adequate impression on the minds of the assembled auditors.

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5. A Practical Treatise on Hæmorrhoids or Piles, Strictures, and other important Diseases of the Rectum and Anus; being, with some additions, a Treatise to which the Jacksonian Prize was adjudged by the Royal College of Surgeons. By GEORGE CALVERT, Member of the Royal College of Surgeons of London, &c. 8vo. pp. 359. London, 1824.

☞ In our next.

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6. Observations illustrative of the Nature and Treatment of the prevailing Disorders of the Stomach and Liver. By THOMAS JOHN GRAHAM, M.D. M. R. C. S. 8vo. pp. 224. London, 1824.

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7. Manuale Medicum, or a Medical Pocket-book, for the use of Students. Adapted to the last edition of the Pharmacopœia Londinensis. By H. L. SANDERS, Surgeon. Small 8vo. pp. 200, Callow and Wilson, Sept. 1824.

☞ In this little Work, we recognise the plan and much of the substance of Dr. George Pearson's Lectures. It comprises a great mass of elementary and standard matter in a small space, and lucid order. It is divided into two parts; the first containing the various articles of the Materia Alimentaria and Medica, arranged into classes, followed by their doses, and mode of exhibition. The second part relates to Diseases, and is arranged into classes, orders, &c. containing briefly the character, symptoms, diagnosis, prognosis, causes, and treatment of the more important Disorders of this Country, rendered into Latin, and adapted to the Cullenian arrangement. It will prove a useful manual to the student, and to those who are to undergo examinations before the constituted Authorities.

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8. Dissertatio Inauguralis quædam de Topographia Medica Complectens. THOMAS A. WISE, M.D. Auctor.

☞ A very creditable Thesis.

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9. Practical Remarks. Part 1.—On Acute and Chronic Ophthalmia, Ulcers of the Eye, &c. &c. Part 2.—On Remittent Fever, viz. Simple and Complicated. By THOMAS O'HALLORAN, M.D. Author of "Treatises on the Barcelona and Andalusian Yellow Fever Epidemics. 8vo. pp. 148. London, 1824.

☞ In our next.

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10. Vindication of the introduction in Edinburgh of Vapour and Medical Baths; together with a Letter to the Managers of the Royal Public Dispensary, on what passed at a Meeting for the Institution of a New Dispensary for Diseases of the Skin, and on the Saving that may be made to the Public in their generous and charitable contributions. By WILLIAM SCOTT, Esq. 8vo. sewed. Ed. 1824.

☞ We are sorry to see these appeals to the public, on local and private clashings of interest. But, alas! Edinburgh has long been famous for these "domestic rows." Were we only to listen to one side of the question, we should suppose Mr. Scott has been hardly treated by his young friend, Dr. Duffin. But, "audi alteram partem," is a maxim from which we hope we shall never swerve.

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11. Revue Medicale Francaise et Etrangere, Journal de Clinique de l'Hotel Dieu, et de la Charité de Paris. Aug. Sept. Oct. and Nov. 1824.

☞ We congratulate the Editors of this Journal on the increasing fame of their Work. The Revue Medicale is not surpassed by any periodical Journal in Europe or America.

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12. Observations on the History, Use, and Construction of OBTURATEURS, or what have hitherto been called in this country *Artificial palates;* with cases illustrative of recent improvements. By James Snell, Surgeon-dentist; member of the Royal College of Surgeons in London. 8vo. pp. 52, September, 1824.

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13. Concise Narrative of an Ophthalmia, which prevailed in a detachment of His Majesty's 44th Regiment, on their voyage to Calcutta, in the summer of 1822, together withan account of other Tropical Diseases, and their treatment on board the H. C. Ship, Warren Hastings. By Richard Jones, F. R. C. S. &c. 8vo. stitched, pp. 57. Warwick, 1824.

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14. Observations on the History and Treatment of the Ophthalmia accompanying the secondary forms of Lues Venerea. Illustrated with cases. By Thomas Hewson. A. B. member of the Royal College of Surgeons in Ireland; Professor of Materia Medica and Pharmacy to the College; and Surgeon to the Meath Hospital, and County of Dublin infirmary, &c. &c. &c. 8vo. pp. 117. London, 1824.

☞ In our next.

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15. A Nosological Practice of Physic, embracing Physiology. By George Pearson Dawson, M. D. 8vo. pp. 380. London, 1824.

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16. System of Anatomical Plates, with descriptive Letter-press, by John Lizars, F. R. S. E. Fellow of the Royal College of Surgeons, and Lecturer on Anatomy and Physiology, Edinburgh. Part VI.—muscles and joints of the lower extremity.

☞ The sale of this work has already become prodigious—a proof that it is generally esteemed by the professional Public. We do not say that it is without faults—we mean in the plates—but, taken altogether, it is one of the best and the cheapest publications of the kind produced in this country.

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17. An enquiry into the mode in which Mercurial Ptyalism operates in the cure of Acute Disease; and whether there exist other remedies of similar action that may be advantageously substituted for it. By James Arnor, Author of a Work on Diseases of the Urinary Organs. 8vo. sewed, p. 16. Callow and Wilson, October, 1824.

☞ See Periscope.

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18. Lectures on Digestion and Diet. By Charles Turner Thackrah, member of the Royal College of Surgeons of London—of the "Societé de Medicine-pratique," de Paris, &c. Royal Octavo, pp. 156. Longman & Co. October, 1824.

19. A Treatise on the Use of the Natural and Factitious Waters of Carlsbad, Ems, Marienbad, &c. By Dr. F. Kreyseg, of Dresden, Physician to His Majesty the King of Saxony, &c. Translated from the German by W. F. Beken. Part. II. London, 1824. Octavo, pp. 155.

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30. The Anatomy of the Brain, adapted for the Use of Students, comprising directions with regard to the method to be pursued in its Dissection, conformable to the mode practised by most Anatomists. Epigraph "Lege Memoriæque Mandato." Duodecimo, pp. 162. London, Callow & Wilson, October, 1824.

☞ This is a concise and convenient Vade Mecum for Cerebral Dissections. It contains the mode of dissecting the Brain, as well as an enumeration of its various parts. A short Appendix conveys a slight sketch of Gall and Spurzheim's Method of unravelling this intricate portion of our organization.

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21 An Essay on Curvatures and Diseases of the Spine, including all the Forms of Spinal Distortion; to which the Fothergillian Gold Medal was awarded by the Medical Society of London; and presented at a Special General Meeting, on 3d of May, 1824; with some additions. By R. W. Bampfield, Esq. one of the Surgeons to the Royal Metropolitan Infirmary for Diseases of Children—Fellow of the Medical Society of London—Author of a Practical Treatise on Tropical and Scorbutic Dysentery, &c. 8vo. pp. 587. London, October, 1824.

☞ See the present Number of this Review.

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22. Outlines of a System of Medico-chirurgical Education, containing Illustrations of the application of Anatomy, Physiology, and other Sciences, to the principal practical points in Medicine and Surgery. By Thomas Turner, member of the Royal College of Surgeons, London; Lecturer on Anatomy, &c. 8vo. pp. 369, with coloured plates. Underwoods, Oct. 1824.

☞ This is not a Work on Medical Education, in the common acceptation of the term. It is, in fact, an Epitome or outline of Anatomy and Physiology, with slight glances at Pathology, Surgery, and Therapeutics. In this sense, it may be useful to students, as an Index to the subjects which they ought to study. It has nothing to do with any plan of studies.

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23. Hints towards the adoption of an Improved Principle of remunerating the Surgeon-Apothecary, or General Practitioner in Medicine, addressed to the members of the Profession, and the Public at large. By T. M. Greenhow, member of the Royal College of Surgeons, &c. 8vo. pp. 26. Newcastle, November, 1824.

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24. Clinical Report on Dropsies; with observations explanatory of their Pathology and Therapeutics; with an Appendix on the Theory and Treatment of Organic disease in general. By Robert Venables, Bachelor in Medicine, and Licentiate in Physic of the University of Oxford, Physician to the Henley Dispensary, &c. 8vo. pp. 238. Underwoods, Nov. 1824.

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25. A Treatise on the most celebrated Mineral Waters of Ireland, containing an Account of the Waters of Ballyspillan, Castleconnel, Ballynahinch, Mallow, Lucan, Swadlinbar, Goldenbridge, Kelmainham, &c. and of the Spa lately discovered at Brownstown, near Kilkenny; with plain Directions during the use of the Mineral Waters, &c. By Michael Ryan, M. D. member of the Royal College of Surgeons of London, &c. Octavo, sewed, pp. 45. Kilkenny, November, 1824.

☞ This little Treatise will prove a useful index to the Medicinal Springs of the Sister Isle.

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26. A Map of the Ear; the Subjects taken from Anatomical Preparations in the possession of John Harrison Curtis, Esq. designed chiefly for the use of his Pupils.

☞ In this Plate, which is beautifully coloured, there are nine figures, eight of which delineate the parts separately—and the ninth exhibits a general view of the anatomy of the head in the vicinity of the ear. This Plate is certainly well calculated to facilitate the student's early acquisition in aural anatomy, and to him we can recommend it.

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27. Opinions on the Causes and Effects of the Disease denominated Tic Douloureux; deduced from Practical Observations of its supposed origin in Lateral Pressure, Distortion, or Undue Contact in the Teeth; but more particularly those nearest the Maxillary Sinus, and thence conveying its distressing sensations to the more distant extremities of the System. The whole illustrated by three Lithographic Engravings, with Cases, &c. By Charles Bew, Surgeon-Dentist to His Majesty, &c. Octavo, pp. 94. London, Underwood and Co. December, 1824.

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28. Philadelphia Journal of the Medical and Physical Sciences, &c. Number 16, for August 1824. Conducted by Dr. N. Chapman, &c.

In Exchange.

☞ In this Number the erudite and very able Editor has commenced an interesting Memoir on Epidemics.

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29. Researches, Physiological and Pathological; instituted principally with a view to the improvement of Medical and Surgical Practice. By James Blundell, M. D. Lecturer on Physiology and Midwifery at the united Hospitals of St. Thomas and Guy. Octavo, pp. 145, three Plates. Cox and Son, December, 1824.

☞ In our next.

*** Note.—Authors and publishers will readily appreciate the importance of having their works recorded, with full length titles, on this list, which stands as a perpetual advertisement so long as the Journal lasts, and as far as it extends. The republication of the Journal in America enhances the advantages of the Bibliographical Record, on which no work can be entered, unless transmitted free of expense, to the Editor, under sealed cover to the publishers, or in any other way most convenient to the parties concerned.

XI.

OBITUARY.

Dr. SAMUEL CLEVERLY.

Among the numerous cases of distress to which the attention of benevolent persons has been solicited, few have occurred more deplorable than that occasioned by the death of Dr. Cleverly, who was cut off in the prime of life, leaving a wife and five sons (the eldest fourteen) utterly in a destitute state.

This gentleman fell a victim to a fever of only five day's duration, which attacked him while engaged in his professional duties.

His early prospects were blighted by his detention in France for eleven years, during which his kindness to his fellow-prisoners, both professionally and in a pecuniary point of view, was unremitting.

Dr. Cleverly, who was physician to the Orphan Asylum as well as the Fever Hospital; was a Licentiate of the College of Physicians, and highly esteemed by his professional brethren.

After this appeal is made to the feelings of Medical Men, the friends of the family trust that the Public at large will be interested in the case of Dr. Cleverly, who died in their service.

The following Gentlemen have formed themselves into a committee to promote a Subscription, and will receive the same:—

Dr. Babington, Aldermanbury
Dr. Merriman, 34, Brook Street
Dr. W. Philip, Cavendish Square
Dr Sims, 37, Wimpole Street
Dr. Cooke, Gower Street
Dr. Darling, 6, Russel Square
Dr. Clutterbuck, Bridge-st. Blackfriars.
Dr. Bright, 14, Bloomsbury Square
Dr. Billing, 5, Bedford Place
Dr. Gordon, 2, Finsbury Square
Dr. Conquest, 45, Finsbury Square
Dr. Scudamore, 6, Wimpole Street
Dr. Armstrong, Russel Square
Dr. James Johnson, Suffolk Place, Pall Mall East
Dr. Henderson, 6, Curzon Street
Dr. Warburton, 5, Clifford Street
Dr. J. Sims, 29, Cavendish Square
Dr. Granville, Grafton Street, Berkeley Square
Dr. Outram, Hanover Square
Dr. Robinson, New Broad Street
Dr. Ayre
Dr. Birkbeck, New Broad Street
Dr. Tweedie, Ely Place
Dr. Filkin, 48, Great Coram Street, Russel Square
Dr. Temple, Bedford Row

Sir A. Cooper, Bt. Spring Gardens
J. Abernethy, Esq. 14, Bedford Row
B. Travers, Esq. Broad Street
H. Cline, Esq. Lincoln's-Inn-Fields
E. Stanley, Esq. Lincoln's-Inn-Fields
H. Earle, Esq. George-st. Hanover-sq.
B. C. Brodie, Esq. Saville Row
F. Copeland, Esq. 4, Golden Square
H. Alexander, Esq. 6, Cork Street
J. Stevenson, Esq. 18, Margaret-st.
J. Wardrop, Esq. Charles Street, St. James's Square
W. Maule, Esq. 185, Piccadilly
M. Ware, Esq. 22, Bloomsbury-sq.
R. R. Pennington, Esq. 21, Montague Place
R. Verity, Esq. Bolton-st. Piccadilly
W. Acret, Esq. 1, Francis Street Bedford Square
Jos. Hayes, Esq. Upper Charlotte-st. Fitzroy Square
D. Price, Esq, 9, Upper East Smithfield
Samuel Plumbe, Esq. Great Russel Street, Bloomsbury
J. Symes, Esq. 80, Judd Street
H. D. Jones, Esq. 7, Gt. Newport Street
J. Morgan, Esq. Bedford Row

Dr. Uwins, 13, Bedford Row
Dr. Richardson, 37, Bedford Square
Dr. Burrowes, Gower Street
S. Cartwright, Esq. 32, Old Burlington Street
Dr. Shepherd, 14, Russell Square
Charles Munay, Esq. John Street
A. Barker, Esq. Northern Dispensary, New Road
Dr. Roget, 39, Bernard Street, Russell Square
Dr. Bostock, 22, Upper Bedford Place
W. Drew, Esq. Gower Street
E. Forster, Esq. of the Banking House of Sir John Lubbock, Bt. & Co. 11, Mansion House Street
J. L. Mallet, Esq. 52, Upper Gower Street, Bedford Square
Godfrey Sykes, Esq. Powis Place
John S. Taylor, Esq. Great James Street, Bedford Row
David Wallace, Esq. 1, Fluyer-st.

And at the Banking Houses of Sir John Lubbock & Co. 11, Mansion House Street; Messrs. Hoare, Fleet Street; and Messrs. Goslings and Sharpe, 19, Fleet Street; Sir Claude Scott, Bart. & Co. Hollis Street, Cavendish Square.

The following Gentlemen have kindly consented to collect any Subscriptions not paid at the Bankers :—Dr. Ayre, Dr. Filkin, Mr. Jones.

MR. PARKER.

This Gentleman, who was likely to prove an ornament to the Profession, by his talents and acquirements, suddenly expired on Monday, the 6th of December, at his house in Devonshire Street. He was in perfect health, and in consultation with the Editor of this Journal, at 12 o'clock of the day he died. At 5 o'clock, he took 25 drops of laudanum and retired to bed, complaining of head-ache, as he had been called out the night before. At nine o'clock he was found quite cold and lifeless; so that he must have expired shortly after he retired to his bed. On examination, it was found that he died of sanguineous apoplexy.

SURGEON O'BEIRNE.

On Wednesday, the 8th of December, died, after a lingering and painful illness, Mr. O'Beirne, an army surgeon, at his lodgings in the Edgeware Road. This was a most promising and enterprising young gentleman. He served in the disastrous campaign against the Ashantees, and was close to the Governor when he fell into the hands of the barbarians.—In that campaign, he caught the jungle fever, which afterwards assumed the intermittent type, and harassed him till his death. He was attended by Dr. Forbes of Argyle Street, with unremitting assiduity, and latterly by Dr. James Johnson and Surgeon Macan. These gentlemen examined the body after death. The emaciation was extreme. The right side of the chest, before and after death, emitted no sound, except under the clavicle, which led Doctor Johnson to suppose that, in addition to enlarged and diseased liver, (which was evident,) there was hepatization of the right lung.—This was not the case; but it was found that a suppuration in the upper portion of the liver, rose up and filled almost the whole of the right cavity of the thorax, pushing up the diaphragm to within three or four inches of the clavicle. The abscess was ready to burst. The lung of that side was almost annihilated, but still the small portion that remained was sound.—Nearly four pints of a bad purulent matter were evacuated from the abscess, and the liver was immensely enlarged. The spleen was, also, greatly enlarged and, with the liver, encroached on the left side of the thorax. The diagnostic error into which Dr. Johnson was led, from the want of sound in the right side of the chest, was very pardonable, since, although the lung was not *hepatized*, its place was usurped by diseased *liver* and an abscess, which came to nearly the same thing, as far as the diagnosis by percussion was concerned.

DR. BRIDGER.

Lately died, after a severe and protracted illness, at his lodgings in Sloane Street, Dr. Wm. Bridger, Surgeon in the Honorable East India Company's Naval Service. Dr. Bridger was a gentleman of remarkably amiable disposition, and pleasing manners. His illness began three or four years ago, as an affection of the mucous membrane of the lungs; for the relief of which, he tried the milder skies of Southern Europe, but without benefit.—The disease gained the parenchymatous structure of the lungs, and latterly, assumed the fatal form of phthisis. He was attended by Dr. Chambers and Dr. Johnson, who endeavoured to smooth the dreary path to that bourne whence no traveller returns!

XII.

INTELLIGENCE, &c.

1. LITHOTOMY.

J. Weiss respectfully submits to the inspection of Professional Gentlemen, and of the Public in general, an Instrument capable of being passed through the urethra, and adapted for perforating and breaking the stone in the bladder. He takes this occasion to state the reasons which urged him to accomplish this important desideratum in surgery. Frequent mention had been made, in the newspapers and other journals, of an instrument of this description constructed by a Dr. Civiale of Paris, to whom several eminent surgeons in this country had written, requesting to be supplied with it, but without success, as he did not wish it to become public. Various applications were, in consequence, made to J. Weiss; and his answer was, that if any person could introduce a straight instrument into the bladder through the urethra, he could invent such an instrument. He instantly proceeded to make the attempt; and its result has justified his expectations. The instrument contructed by him has been approved by competent judges, and has been pronounced, by a French surgeon, who has examined it, to be of much smaller dimensions, and more simple in its construction, than that of Dr. Civiale. Having taken neither that nor any other for his model, J. Weiss considers himself warranted in calling the present invention his own; but he leaves the question of its merits to be decided by public opinion.

He has thought proper to annex to the engraving of it, a representation of his instrument for extracting Calculi through the Urethra, which has been used with very great success. Its claims to preference he submits to the candid and equitable judgment of the Profession.

2. NATURAL HISTORY, BOTANY, &c.

The whole, or any part of the following Books, may be brought for one third less than their original prices. They are all in excellent order, and may be seen any morning before 1 o'clock, at Mr. Soles', 7, *Gray's Inn Square*.

Hill's, Sir John, Vegetable System, vols. 26 in 13, large folio, ½ bound, ed. 1773. Hill's British Herbal, vol. 1, large folio, bound, plates colored, edition 1756.—Merion's Surinam Insects, Fruits & Flowers, vol. 1, large folio, 1 d. English MS. translation from the original, plates cold. ed. 1719.—Curtis's Flora Londinensis, vols. 6, large folio bd. plates cold. ed. 1777.—Philosophical Transactions abridged, vols. 18, 4to. handsomely ½ bd. & lettered, ed. 1809.—Sydenham's, Edward, Botanic Garden, vols. 2, large 4to. well bd. plates beautifully colored, ed. 1812. Dictionnaire Raisonne d'Histoire Naturelle, vols. 4, bd. 4to. ed. 1768.—Thornton's Elements of Botany, vols. 2, large 8vo. neatly bd. ed. 1812.—Donovan's

British Insects, vols. 10 in 5, large 8vo. handsomely bd. plates beautifully col'd. ed. 1800. Linnæus' System of Nature, translated by Turton, vols. 4. large 8vo. well bd. ed. 1800.—Linnæus' Genera Vermium, translated by Basbert, vol. 1, 4to. handsomely bd. beautifully cold. ed. 1788.—Les Genus des Inscites, translated by Basbert, vol. 1, 4to. bd. Ellis's Zoophytes, by Solander, vol. 1, handsomely bd. fine paper, ed. 1786.—Ellis's Coralines, vol. 1, 4to. bd. handsomely, fine paper, ed. 1755.—Rashleigh's Cornish Minerals, vol. 1, 4to. handsomely bd. beautifully col'd. fine paper, ed. 1797.—Woodville's Medical Botany, vols. 4, 4to. handsomely bd. col'd. plates ed. 1810.—Pennant's British Zoology, vols. 4, 8vo. handsomely bd. col'd. ed. 1776.—Ellis's Manjustan, and Langhorn's Fables of Flora, bd. together in 1 vol.—Bryant's Flora Dietetica, vol. 1, 8vo. bd. ed. 1783.—Lee's Introduction to Botany, vol. 1, 8vo. ½ bd. ed. 1794.—Smith's English Flora, vol. 2, bd. ed. 1824.—Donn's Hortus Cantabrigiensus, vol. 1, bd.—Conversations on Botany, vol. 1, 8vo, bds. plates cold. ed. 1820.—Spallanzani on the Natural History of Animals and Vegetables, vols. 2, well bd. large 8vo. edition 1803.

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3. The Plan of Lectures on the Anatomy, Physiology, and Pathology of the Ear, by JOHN HARRISON CURTIS, Esq. F. M. S. Aurist to His Majesty, and their Royal Highnesses the Duke and Duchess of Gloucester, Surgeon to the Royal Dispensary for Diseases of the Ear, &c. to commence on *Thursday, January 5th*, 1825, at seven o'clock in the Evening, at the Royal Dispensary for curing Diseases of the Ear, 10, *Dean Street, Soho Square.*

Arrangement of the Course.—In the Introductory Part, will be considered the Importance of the Sense of Hearing as the medium of social intercourse; the various degrees of this Sense in the several tribes of Animals; with the different construction of the Organ for that purpose.

The Anatomy of the Human Ear will be described, as divided into external, intermediate, and internal parts; and the description will be illustrated by Anatomical Preparations.

The Physiology, or Uses of the different parts of the Ear, will next be examined.

On finishing the Structure and Uses of the Ear, the various Diseases occasioning Deafness will then be considered, treating them in the same order in which the Structure has been described.

This order will comprehend, first, the Affections of the Meatus Auditorius, or external ear; 2ndly, those of the Tympanum, *viz.* its puriform discharge, and the Obstruction of the Eustachian Tube, with the Operation; 3rdly, the Diseases of the Labyrinth, whether constitutional, as nervous, scrofulous, syphilitic, &c.; or local, as Paralysis of the Auditory Nerve, defective Organization, &c.

The Subject will conclude with general Remarks, applicable to this class of Diseases; to which will be added, Considerations on the best means of treating the Deaf and Dumb.

A CLINICAL LECTURE will be given occasionally on the most important Cases that occur at the Royal Dispensary.

The Royal Dispensary is open to Pupils;—TERMS.—*Attendance:* Three Months, Five Guineas; Six months, Eight Guineas; Perpetual, Ten Guineas. *Lectures:* Single Course, Two Guineas; Two Courses, Three Guineas; Perpetual, Five Guineas.

For Particulars, apply to Mr. CURTIS, *at his House, No. 2, Soho Square.*

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4. A complete Edition of the Works of the late Dr. BAILLIE, with an Account of his Life, collected from the most authentic sources, will speedily be published by Mr. WARDROP.

XIII.

EXTRA LIMITES.*

I.

AUTO-ADVERTISING, AND MEDICAL DEGREES.

To the Editors of the Medico-Chirurgical Review.

GENTLEMEN,

From the tenor of your Journal, I conceive it is your inclination, as it, unquestionably, is your duty, to pay attention to the *dignity*, and consequently the *interests*, as well as to the *Science* of Medicine and its professors. I need not inform you, Gentlemen, that those who practice the healing art, are, unhappily, obnoxious to much illiberality from abroad, and some temptation from within. The world is censorious enough, even where no cause is given for censure. There is a general prepossession against Physic, as well as against Law—and few, I believe, have recourse to one or the other, but from necessity. For this, and for various reasons, medical men ought to be exceedingly cautious in resorting to any measure which may tend to lower the dignity of the science, however advantageous it may be to themselves individually. It is the object of this paper to touch on an evil, which has increased at a prodigious rate, of late years, and which is now becoming so much the subject of public remark, as to threaten a general odium on

* N. B. As no explanation of the nature and objects of the Extra-Limites department of this Journal has been given in this New Series, it may be proper to say a few words on the subject.

When this Work changed its form, from a Miscellaneous Repository to that of a *Review* exclusively, it was hinted that gentlemen would occasionally wish to obtain extensive circulation for defences against criticisms, or even original discoveries, through the medium of the Medico-chirurgical Review. It was obvious that such papers must be beyond the regular limits of the Work, and consequently gratis to the public; otherwise the plan would be broken up, and the Journal cease to be a Review. With the design of accommodating individuals, without detriment to the subscribers or the conductors of the Journal, the Extra-Limites department has been established, in which every man may *claim* a place for his observations, provided they are couched in temperate language, and not containing personal, offensive, or libellous matter. Over *these*, the Editor must necessarily exercise a control—but in every thing else, the Extra-limites is neutral ground, where the criticisms of this, as well as of other Journals may be freely discussed and combated.

It is only necessary, in conclusion, to observe, that the expense of paper and type falls on the authors of the papers.

the profession: I mean now the prevailing practice of medical men advertising themselves. This custom is, at present so universal, that it is no easy matter for the public to draw the line of discrimination between the REGULAR and the QUACK. Indeed, as far as the expedient of advertising is concerned, I defy any man to draw a satisfactory distinction between the one and the other? I do not mean to say that a Physician's or a Surgeon's name should *never* appear in any advertisement; because the thing is sometimes unavoidable; but I will venture to draw a line of demarcation between proper and improper—that is, between honorable and venal *modes* of advertising in the public prints.

First. MEDICAL ELECTIONS. When a candidate for an hospital or dispensary commences his canvass, it is proper to address the governors and patrons of such institutions, through the medium of a newspaper? The propriety of this practice is very questionable. The Royal College of Physicians discountenances this practice among its *Fellows*—and it will be allowed by all, that the College studies, with no small degree of intensity, whatever conduces, or is supposed to conduce, to the respectability and interests of its own body. I, therefore, am inclined to think the College right in this respect, but wrong in not extending the same regulation to the Licentiates. Let us reason for one moment on this point. The candidate for a public institution canvasses the governors privately and individually—and justifiably lays before them such documents as bear on his professional and moral character. This is enough. All addresses to the Public at large are unnecessary, as far as the immediate object of the candidate is concerned, and certainly appear to me to approach the verge of AUTO-ADVERTISEMENT. If this term, however, applies not to the simple avowal of a candidate's intention to canvass for a public institution, yet I think it will fairly apply, when the said candidate couples with such avowal a recitation of his own merits—of the experience he has had—and of the high opinions which have been formed of him—and all this through the medium of an advertisement in a public newspaper?—this, I maintain, is *Auto-advertisement.** In short, Gentlemen, it is now notorious that, when a vacancy occurs in a public institution, a whole swarm of candidates start forth—not for the purpose of canvassing the electors—but solely with the view of advertising themselves. Is this consistent with the dignity of the medical profession?

Secondly. Medical Lectures. I have said that it is sometimes unavoidable that the names of physicians and surgeons should appear

* M. Biot, of the Institute, some time ago drew a good distinction between the philosophical and charlatanic physician. Speaking of the *latter*, he observes—"Le Charlatan au contraire, a besoin de dehors qui frappent *le peuple* et qui préviennent l'examen. Loin de s' addresser à des juges éclairées, il les recuse, il les taxe d'une severité exagerée, souvent même d'envie et d'injustice; c'est à la multitude qu'il en appelle, *Les feuilles publiques sont la theâtre éphemére où il établit sa renommée.*

in public advertisements. It is proper and necessary that Lecturers—actual Lecturers—should announce their courses through the medium of the public prints, at proper times and seasons. But when men who are notorious for not having a single pupil, occupy with their advertisements the *sinister* corner of every fashionable paper and that for weeks and months—have we not a right to put down such practice under the head of *Auto-advertisement?* Even the regular lecturer, with a fair class of auditors, should be economical of his reputation, as well of his purse, in resorting *too often* to this measure.

Thirdly. Medical Books. This mode of *Auto-advertisement* is the eldest, most extensive, and best understood of any. It may, indeed, be considered as the parent stock, from which all the others have sprung. I do not, of course, allude to the myriads of publications daily issuing from those who are out of the pale of the profession. These are instantly recognised, and readily appreciated by the republic of medical science. They impose on the people and probably will for ever continue to do so. I here allude to the practice of *making* a book upon some particular disease, or class of diseases—totally regardless of its reception among real judges—and with the sole view of having something to *make* an *advertisement* of, and keep the name of the author constantly before the public, in the newspapers. I would not be considered, Gentlemen, as censuring any thing but *abuses*. If a book be published, it must be advertised, and in that way the names of all that grace our Sciences have come, and daily come, before our eyes, in the public prints. This is unavoidable. But when, on the advertisement of a book, ten times more money is spent than the sale of it can possibly cover—then, I say, and confidently affirm, that the principle and spirit of Auto-advertising are in full operation.

Fourthly. There is one subject which I purposely left unnoticed; when speaking of Medical Elections, in order that I might give it a fuller consideration under a separate head. It is stated in justification of the appeal of the *Licentiate* to the public, through the medium of the newspapers, in cases of election, that he has no other chance left, when contesting the point with the *Fellow* of the College, since the *latter* is sure to have the influence of the College thrown into the scale against him. This is complained of as a great evil—and if it exist, which I am not prepared to deny, it must be confessed that it is a very great one. So mighty and preponderating, indeed, are the disadvantages under which the *Licentiate* labours—so clearly and generally is it now known that he has *no* chance of appointment to a public hospital—and comparatively little hope of success in private practice in this metropolis—that I conceive the evil must cure itself, in the course of the next twenty years.* I am of opinion that the evil will find remedy in

* From the document which accompanies this paper, you can vouch, gentlemen, that I now belong to neither class above alluded to, and consequently that my sentiments are, at least, free from bias to either side.

a way very different from that contemplated by the present race of Licentiates. It will never be cured, nor is it desirable that it should be cured, by forcing concessions from the College. It will be remedied by a general knowledge of the advantages attendant on a fellowship—and the disadvantages under which the Licentiate labours. Henceforth, no man who can possibly avoid it, will educate his son with the view of practising as a physician in this metropolis, but through the channel of a fellowship. It would be madness to do otherwise. I venture, therefore, to predict that, from this time forward, the proportion of Fellows will annually increase, and that of Licentiates diminish. A time must consequently come, and that at no distant date, when the fellowship will be so extended, as to remove any thing like competition or clashing between the two classes of physicians.

But it will be said, and with reason, that, in the mean time, many men of great talents, integrity, and acquirements, will unmeritedly suffer. Not a doubt of it. But this will always be the case, and it can be no good reason why improper, temporary, or unavailing remedies should be had recourse to.

When it is considered that the influx of men into the medical profession is far out of proportion to the demand—that this crowded state is productive of great evil to the actual practitioners, forcing many of them on ways and means not calculated to heighten the dignity of the faculty—it will surely be granted, that any check to such influx, founded on an extension of general and scientific education, is both salutary and desirable. On this account, I maintain that it is far better the necessary academical education of the physician should rise to that of the FELLOW, than remain, as it now does, without any fixed standard, as in the case of the LICENTIATE.

I have said that, hereafter, the list of Fellows will increase much more in proportion than that of the Licentiates. This must be the case, when the immense advantages of the one, and disadvantages of the other, come to be properly appreciated by the public at large—and especially by those members of the profession who design their sons for the station of physician, with the chance of practising in the metropolis. Now, let us inquire what are the sacrifices or expenses necessary to secure a fellowship, instead of a licence. It is nothing more than giving a youth three years' University education, as a preparatory for his medical studies, instead of the same number of years spent in the private acquisition of classical and general knowledge. Let me explain. Suppose a physician, surgeon, or general practitioner, residing in London, Dublin, or Edinburgh, designs his son for a physician. At the age of 18 or 19, after a fair scholastic education, he sends him to Oxford, Cambridge, or Trinity College, Dublin, for three years—at an expense within two hundred pounds per annum. At the expiration of this period, he takes a Bachelor's degree, and no more actual residence at the University is required. He now returns to his paternal roof, and applies himself for four years to the study of medicine in all its branches, either in London, Dublin, or Edinburgh, where the parent may happen to reside. At the end of

these four years, he is in a situation to commence practice (and it is early enough at the age of 25 or 26) as an inceptor candidate, with the certain prospect of becoming a fellow of the College at the age of thirty. Now, Gentlemen, I would ask you, and the profession at large, whether the above course is not better calculated to make a good and a respectable physician, than the one now generally pursued by the Licentiate—and yet at an expense very little exceeding that which attends the diploma of the latter. Is not a good scholastic education necessary ?—Is not three years' University education highly desirable ?—Is not four years study of all the branches of medical science, *in London*, as good (to say no more) as the same, or half that period spent in Edinburgh or Glasgow ?—no man of unbiassed judgment will answer in the negative. And I will venture to affirm that no medical man, who designs his son for a physician, and who has the welfare of his son at heart, will fail, in future, to push his classical, academical, and medical education through the channel which I have pointed out, in order to secure him against the mortifying degradation which he must expect as a *Licentiate* in London.

I may here suggest, that the College of Physicians should, in addition to the University course, require proofs of four years' regular study in London, Dublin, Edinburgh, Glasgow, or Paris. If they did this, they would for ever stop the mouths of those who rail at degrees taken where no efficient school of medicine exists.

Lastly. It is a melancholy truth, that there is no good in this world, without some attendant evil. While the above-mentioned course of studies will draw physicians from a respectable class of society—render them learned and well-grounded in the elements of their science—raise them in public estimation—and prove a check on all deviations from strictly professional conduct—it must be conceded that it will bear hard on many a genius whose "res angusta domi" compels him to seek an humbler path to the *summi honores* of medicine ! But this must ever be the case, with the wisest and best of human laws and human institutions. The GOOD attendant on raising the general body of physicians in respectability, far counterbalances the EVIL of repressing a few choice spirits. But, even in this view of the subject, there is a consolation which rests on the history of all ages and countries. TALENT, of a certain order, will surmount all difficulties—and more than surmount them—it will shine the more conspicuous in proportion to the magnitude of the obstacles which have come in its way.

Withdrawn from the cares and anxieties of professional avocations, I am still an attentive observer of what passes in the medical world, and I can conscientiously declare, a sincere well-wisher of the profession to which, for nearly 40 years, I belonged.

I am, Gentlemen,

Your most obedient servant,

PHILO-MEDICUS.

Hampstead, Dec. 1, 1824.

II.

MR. HICKES ON PREGNANCY AND ASCITES.

To the Editor of the Medico-Chirurgical Review.

Sir,—Your statement of Mr. Langstaff's inability to procure advice, in a case of *ascites* in pregnancy, co-operating with solicitude for preservation of human life, even in an embryo state, counteracts my habitual reluctance to obtrude any novel mode of treatment on public attention.

Two cases of peculiar delicacy, incidentally required my exertion in capacity of accoucheur, although, for several years, the extent of my professional avocations has precluded my retention of that branch of practice.

About two years since a case of *ascites*, concurrent with pregnancy, was submitted to my care, subsequently to denial of pregnancy by one of the most eminent in the profession. Reluctant, through subduction of the *liquor amnii*, to destroy the fœtus, I ventured, on my own responsibility, even unencouraged by precedent, consultation, or recorded authority, to originate operation for *ascites*, on a pregnant patient. I was, in the first instance, influenced by consideration of the ordinary transmission of blood, through the *placenta* to the *uterus*, being unavoidably checked, on the exterior layer of its muscles, with their integuments, being brought into contact with the *parietes* of the *uterus*, through loss of the *liquor amnii*. In the next place, the *diagnosis* of impregnation being, to my perception, indisputable, I was solicitous to relieve tension of the abdomen, by exhausting the redundant lymph in the abdominal absorbents. Through such operation, I therefore anticipated a triple effect;—immediate alleviation of the patient's extreme suffering—facilitation of approaching parturition—with preservation of life both to parent and offspring. It was an experiment—if bold, by no means adventurous, and it terminated in the gratifying result of complete eventual success.

In corroboration of the preceding statement, I feel it due, not less to professional character, than to excitement of similar operation in parallel cases, to refer the reader, desirous of ulterior proof, to a letter from my patient, dated January 17th 1823, in consideration of its author's rank, with greater propriety lodged in your possession for inspection of the scientific, than subjected to indiscriminate publicity. Similar treatment of a subsequent case has likewise occurred in my practice.

A lady of Cornwall, returning from Italy, became decrepid during the second month succeeding to cessation of menstruation.—Internal abscesses were developed, through emission of purulent matter from the anus. The consequent debility was excessive. Indeed, the general symptoms presented to the surgeon of the packet indication of approaching termination of life. In such deplorable state, during the fourth month of unsuspected pregnancy,

she placed herself under my direction. Indication of *ascites* in an early stage was decisive—the symptomatic affections were, frequent recurrence of spasm—oppressive respiration in an horizontal posture, with the ordinarily attendant complaints. In the lapse of three or four weeks, the fœtus acquiring competent dimension, detected its head to the usual test, application of the hand. In contempt of such incontrovertible prognosis, the impression of improbability of conception supervening, subsequently to eight or nine years of infecundity, could not be eradicated from the patient's apprehension. It should be stated that, from the period of impregnation, conjugal intercourse fortuitously terminated. Necessity of *early* operation, as in the preceding case, was by no means indicated. Repletion of the abdominal absorbents advanced with inferior progress. Tension on the lungs was felt with less degree of inconvenience. The symptoms in general, certainly unambiguous, were yet unattended with equal oppressiveness.—The object of *paracentesis* being principally to facilitate parturition, although, in part of course, to remove specific disease, the operation was postponed to a week or ten days previous to commencement of labour pains. On delivery, the child appeared full grown, perfect, and of the male sex; but through some undiscoverable cause of excitement, probably adventitious, and unconnected with influence of *ascites*, the umbilical cord, having surrounded the neck, had produced the usual result, strangulation. Operation of some foreign incidental cause was equally suggested by an additional indication—adhesion of the *placenta* to the *parietes* of the *uterus*. The flooding becoming excessive, constrained extraction, through introduction of the hand, became indispensable as an exclusive expedient. Notwithstanding the minutest caution observed in removal of the adherent portions of *placenta*, the consequent inflammation of the uterus required exhibition of refrigerant and antiphlogistic treatment. It was preceded by bleeding, as well through venesection, as through local application of leeches. In the course of three or four months, asthenic symptoms disappearing, the cure of this delicate case attained its consummation.

In a patient presenting such remarkably asthenic symptoms, had not parturition been preceded by *paracentesis*, its pains might have been rendered too excruciating, its duration too prolonged, to be encountered without hazard of life.

One observation remains, equally applicable to both cases: In neither, has the most distant indication of recurrent *ascites* been detected. In the first instance two years, in the second several months, have elapsed without alarm; consequently, *paracentesis* was not merely warranted, by production of instantaneous relief from pain, but was absolutely necessary for attainment of radical recovery. Delay of the operation to any given period, subsequent to parturition, while it inevitably would have augmented the patient's suffering pending labour, would probably have permitted the morbid torpor of the abdominal absorbents to extend beyond possibility of re-invigoration. In such event, irrecoverable loss

of tone necessarily supervening—the patient's life could not fail to have fallen a sacrifice to timid procrastination.

I have the honour to be, Sir,
Your obedient servant,
CHARLES HICKES.

BATH, NOVEMBER 27, 1824.

Note by the Superintending Editor.

The letter alluded to is in the possession of Dr. Johnson, and no doubt of its authenticity can be entertained. Mr. Hickes will observe that, in the second Number of this series, *several cases* of the kind in question have been brought forward, and where paracentesis was successfully performed. Mr. Langstaff, therefore, might have found precedents had he searched for them. Another precedent can now be pointed out, which was recorded 80 years ago, and may be seen in the 5th volume of the Medical Essays and Observations, page 642 *et seq.* The case is related by Mr. Laurie, surgeon in Selkirk, who called in the celebrated Dr. Plummer in consultation. The female was 36 years of age, and was three times tapped during pregnancy. She brought forth a living child, and entirely recovered from the ascites. This point of obstetric practice may now be considered as settled, the precedents being quite numerous enough to form a basis for the general principle.

P. S. Since writing the above, a paper has appeared in the Medical and Physical Journal for December, from Sir L. Maclean, pointing out another case of ascites and pregnancy, which was published many years ago in that gentleman's invaluable work on hydrothorax. As this work is by no means so universally read as it ought to be, and as it is probable that, comparatively, few of the readers of this Journal have it in their possession, an abstract of the case may not be unacceptable here, in order to render our knowledge of the subject as extensive as possible.

June 13*th* 1791, Mrs. C. aged 34, was found by Sir L. with confirmed ascites, unaccompanied by anasarca. She was emaciated, but not proportionally debilitated. The origin of the dropsical affection was dated two years back, since which the catamenia had been irregular. Various remedies had been used, and she had been tapped three times—the last only four days prior to the above date. Sir L—— ascribed the dropsy to disease of the right ovarium. On his next visit (9th August) it was suspected (by the patient) that pregnancy also existed. She was, however, tapped at this time, and toward the middle of August pregnancy was proved by the occurrence of quickening. On the 25th September, paracentesis was again necessary, taking care to avoid injuring the uterus. No untoward circumstance occurred during or subsequent to the operation. By November the 9th the lady was labouring under great distress from distention of the abdominal integuments. The operation again performed. December 30th, paracentesis was performed, which the lady bore with great fortitude and good spirits. During the latter months of pregnancy she became extremely heavy and unwieldy, especially before the two last tappings. She was safely delivered of a strong full grown boy on the 24th January, 1792, the labour having been quick and easy. In eleven days

after delivery paracentesis was again performed. After this, until a sudden change which caused her death, her general health appeared rather to improve. The cause of death was a collection of matter in one of the ovaria, which burst. Sir L. observes that this is the first case which he has met with on record, where the mother and child survived the delivery. He will see that this is an oversight, as Mr. Laurie's case, quoted above, will prove.

Upon the whole, the notice which has been taken of Mr. Langstaff's paper has elicited, from various quarters, much useful and interesting information on this subject, which cannot but prove welcome to the practitioner both of medicine and surgery.

III.

RETROSPECTIONS.

1. *Divided Arteries.* The principal object of Dr. Jones's experiments was to prove that a plug was formed at the extremity of the vessel, by which the bleeding was arrested—and that the effect of a ligature was to produce acretion of the sides of the vessel by dividing their inner coats. Petit and Morand demonstrated, almost exactly, the same things nearly one hundred years ago, in the *Mem. de l'Acad. des Sciences*, for 1731–2–3–4–5. See also *Medical Observations and Enquiries, vol.* iv. *p.* 484, *and vol.* v. *p.* 955.

2. *Fowler's Solution.* It is curious that the erudite Dr. Parr, and the no less erudite Dr. Paris, should have given Dr. Fowler the credit of having first introduced the arsenical solution in its present form, as a substitute for Edwards's tasteless ague drop. Yet, long before either of these was talked of, the present identical preparation was described and given in agues. We have no hesitation in asserting that Dr. Fowler copied the prescription, and published it as his own. But now for proof.

In the first volume of the Medical Museum, page 433, the reader will see the following passage:

"The celebrated John Christ. Jacobo (see *Act. Acad. Elect. Mogunt. secent. util.* which is at Erfurth, in Thuringia, tom. 1, p. 216) describes an arsenical febrifuge, prepared in this manner:

℞ Arsen. Albi, p. j.
Sal. Tart. p. xij.
Aquæ, p. 168.

"This mixture is boiled until the water is consumed to one half. After it cools, the evaporated part of the water is again added, together with a little spirit of wine for its better conservation.

"He recommends this remedy as good for fevers of various kinds. It is given to adults to 30 drops, but to infants are given six, eight, or ten drops."

The article in the Medical Museum was printed in 1758, and the writer mentions his stopping agues with the medicine.

The preparation, as every one may see, is the identical Fowler's solution, except that it is rather weaker, *viz.* 1 part of arsenic to 168 of the menstruum, while Dr. Fowler's form is 1 part of arsenic to 120 of the solution. We again repeat the charge of copyism against Dr. Fowler.

"*Palmam qui meruit ferat.*"

IV.

The COMMITTEE appointed to carry into effect the plan for establishing a National Benevolent Medical Fund, submit, to the consideration of the Profession, the following Prospectus of a Company, to be entitled

THE SURGEON'S AND APOTHECARIES' DRUG COMPANY,

AND BENEVOLENT MEDICAL INSTITUTION.

THE advantages contemplated by the Committee, in the success of this undertaking, are fourfold :—1stly. In the supply of *genuine* and *unmixed* Drugs and Chemicals; an object *utterly unattainable* under the present system.—2ndly. In a saving to the buyer of 20 per cent. on the prices hitherto established.—3rdly. In affording a certain and competent resource for the incapacitated practitioner, who has been unable to provide against the unfortunate contingencies of life.—And 4thly. In securing to widows and orphans such a provision as shall place them above penury and distress, should every other resource be wanting. To effect these desirable objects, the Committee submit the following propositions :—

1st. To raise by shares of £25, each, a capital of £100,000. Subscribers to be practising Surgeons and Apothecaries; and shares to be transferable to practitioners only. An advance of 20 per cent. to be paid at the time of subscribing, and instalments of 20 per cent. to be called for as required; a guarantee being, however, given, that the whole of such instalments shall not be demanded within twelve months from the date of subscription.

2ndly. That no Subscriber be entitled, either for himself or his family, to the benefit of the Benevolent Fund, who holds less than *two* shares.

3rdly. That a dividend of 5 per cent. per annum on the capital advanced, be paid half-yearly to each Subscriber, and that the first profits of the Establishment be added to the Company's capital, until every original share of £25, amounts in value to the sum of £37 10*s.* which will give to each Subscriber an annual interest of 7½ per cent. on his capital actually advanced.

4thly. That as soon as the above increase in capital shall be effected (which the Committee calculate will be done in two years), all future profits to be appropriated to the Benevolent Fund, but no payment to be made to any claimant within three years of this time, unless the amount of the Benevolent Fund exceed the sum of £50,000.

5thly. That the *Benevolent Institution* consist of a Patron and Vice-Patrons, who, with the Directors of the Company for the time being, shall hold in trust the funds appropriated for this purpose.

6thly. To allow an annuity of £100, for life to every Subscriber who retires from business under *ill-health or infirmity*, with a less income than £150, per year.

7thly. To allow to every widow (of Subscribers) the annual sum of £60, during her widowhood, provided she does not possess, from any other resource, an income exceeding the stipend from the Benevolent Fund; and to each child the annual sum of £10, until they attain the age of twenty-one years.

8thly. To grant to the widows and children of such Subscribers as have retired upon the benefits of the Benevolent Fund, the same provisions as the above.

9thly. That the value of the shares of every Subscriber, who retires or dies, be repaid to his representatives or assigns, by the Company, unless he shall have participated, or his widow and children claim to participate, in the benefits of the Benevolent Fund; in either of which case, the shares of such Subscriber shall revert to the Company without fee or purchase.

10thly. In the case of transfer of shares, no benefit to accrue, either to the purchaser or his family, until five years from the date of such transfer.

11thly. That such professional gentlemen, who do not practise pharmacy, be invited to support the Institution, by paying an annual sum of *two guineas*, which will entitle them and their families (if needful) to the benefit of the Benevolent Fund.

Communications to be addressed to the Committee, at Mr. J. CHURCHILL'S, Bookseller, *Saville House, Leicester Square*, where Books are opened to receive the names of Subscribers. *Letters will not be received except post free.*

V.

EXPLANATION OF MR. WEISS'S PLATE.

A, a small handle which turns the borer.
B, the handle of the instrument.
C, a slide for moving the borer forward or backwards, as required.
D, a brass wheel, to which a bow may be attached to promote the action of the borer.
E, an upright for opening or shutting the instrument, by drawing it backwards, or pushing it forwards with the thumb.
F, a catch, to strengthen the hold of the instrument, and to prevent E from slipping backward.
G, is the borer shown between the blades of the open instrument.
H, the blades closed. H. H. the blades expanded, showing the borer.
I, a screw for tightening the string of the bow, when too loose.
K, the bow itself.
L, an instrument that was made with 3 blades, but not considered so good as the one with two; for it increases the difficulty to catch the stone.

To open the instrument, the thumb must be pressed upon F and E, drawn towards D, which is shown underneath. To close the instrument, E must be pushed forward. When the instrument is in the bladder, and opened, the borer must be withdrawn by bringing C towards A, and when the instrument has grasped the stone, C is again moved forward, so as to bring the borer, G, in contact with the stone, and perforate it, by turning A, and pressing C gently forward.

The bow is used by putting the string twice round the wheel, and then letting it in the slit at the end of the bow, by moving which backwards or forwards, the borer is turned much quicker than with the small handle, A.

I have the pleasure to inform the public, that I am now taking out a patent for an Enema Syringe, which will surpass any thing of the kind hitherto produced for that purpose, or for relieving the stomach of poison. I shall take the first opportunity of laying it before the public.

VI.

ELEGANT WARM, COLD, VAPOUR BATHS, &c.

Mr. SEAMAN has fitted up, in a very superior manner, every kind of warm, vapour, cold, and shampooing baths, at his house, *No.* 9, *Suffolk Place*, *Haymarket*, where the Faculty and the Public will meet with every accommodation, and on the most moderate terms.

9, *Suffolk Place*, 22*d Dec.* 1824.

XIV.

TO CORRESPONDENTS.

The Medical Practice advertised in our last Number has been long since disposed of, and right happy we are to have an opportunity of making this an-

nouncement, as it has cost us more than *five pounds* in postage already. The thoughtless practice of directing letters, on such occasions, without paying the postage, is reprehensible; but we are forced to expose the conduct of J. C. S———, Esq. of Chepstow, who lately sent a letter to the Editor, unpaid, respecting the practice above mentioned, and when the answer went back, he refused to receive the letter, which was returned to the Editor with double postage on it!

Dr. Belcher's communication is received, and will be disposed of in the way he wishes. Several communications have been received, which do not require specification, and which we have not acknowledged by letter. The writers may consider this silence, in general, as consent.

The letter of *Censor* contains some truths, but several errors and misconceptions. The mal-practices alluded to, if they exist, which we are not prepared to deny, do not come within the scope of a Medical Review. We have other and more important concerns to attend to.

HUMANITAS is over humane. He must be conscious that, of all Journals the Medico chirurgical Review is least prone to *hypercriticism*. But if *error* is to be combated by serious argument, we do not hold it a crime to treat *folly* with satire. That we should have enemies is natural—but that we have ever permitted personal feelings of irritation to mix themselves with criticisms or comments on books, we most confidently deny. We do not pretend to superior immunity from the failings of human nature—but the one in question we have ever detested, and we defy HUMANITAS, or any other person, to point out a single instance of it in the numerous articles of Review which have appeared in this Journal.

To several subscribers who have written to us respecting back numbers of the Journal, we have to state, that all the numbers from No. 1 to No. 13 have been imported by the publishers, from the American *reprint*, which is verbatim that of the London Edition. The remaining numbers, up to 16, are daily expected from New York, where the Work is regularly republished.

Mr. Beddingfield's "Observatians on Mr. Charles Bell's controversial Lecture," are received, and are under consideration. We hope to be able to review Mr. Bell's Work in our next number. It will then be the proper time to introduce the subject of Mr. Beddingfield's communication. We would advise Mr. B. however, to publish his paper in the original department of some of the Medical Journals previously, as we have no wish to interfere with the plans of other Journals, or alter *our* own.

The anonymous letter "to the Editor of the Lancet," could not have been published with propriety while the subject of it was *sub judice*, and afterwards it would be useless. Besides the whole of the writer's arguments were urged on a former occasion. The letter will be delivered to the writer on application.

TO THE PUBLIC.

With a new year, a new volume, and a new period of publication, we have to express, (in addition to the usual compliments of the season) our thanks for the liberal encouragement accorded by the public to the New Series of this Journal. The proofs of this encouragement, are in the hands of the public for a long time past—as are also the proofs of our gratitude—not consisting entirely of kind thanks, but of *thanks in kind*, to wit, an increase of labour, and an extension of limits, far beyond the original stipulation, and far beyond the usual ratio of similar publications. As this return of remuneration has followed, not preceded, public patronage, it cannot be set down as the cause, but the effect of that encouragement. As such, we trust, it will afford presumptive assurances that success will not enervate, but rather stimulate our industry, in future, as it has done in time past.

January 1*st*, 1825.

Bainbridge, Mr. Surgeon, St. Martin's Lane
Baxter, Mr. Surg. Penton Street, Pentonville
Beck, Dr. Edward, M. B. Ipswich, Suffolk
Belcher, Wm. M.D. Licentiate of the Royal College of Surgeons in Ireland, Bandon
Boyle, Mr. James, 4 Cleveland Square, St. James's
Briscoe, John, M.D. Surgeon to the Waterford Militia, Waterford
Brown, Mr. Surgeon, Stamford Street, Blackfriars
Burke, W. A. M.D. Mauritius
Burrard, Mr. Henry—to South America
Carrick, Mr. A. Surgeon, Kensington
Cooke, Dr. Robert, Surgeon, Royal Artillery
Cowie, Dr. South Crescent, Bedford Square
Dill, Mr. John, Hon. East India Company's naval service
Dray, Dr. D. Plymouth
Filkin, Dr. Great Coram Street, Russel Square
Fincham, Mr. Surgeon, Spring Gardens
Forrest, Mr. Charles, Member of the Royal College of Surgeons of London, Merthyr-Tedvil, Glamorganshire
Gillies, Dr. James, Bath
Gregory, Mr. William, Student
Hardman, Dr. Mark, Rue de Monsieur, à Paris
Hemmingway, Wm. Esq. Surgeon, Dewsbery, Yorkshire
Holdsworth, Mr. Surgeon, Upper Mary-le-bone Street
Holmes, Mr. Surgeon, Botley, Hants
Howlett, Mr. Surgeon, &c. Harrow
Johnston, Dr. John, Armagh, Ireland
Lang, Mr. Surgeon, Highgate
Lanphier, Simon, M.D. Waterford
Library of the Royal West London Infirmary, Villiers Street
M'Cabe, Dr. Parade, Hastings
Nimmo, Dr. John, Hutchison St. Glasgow
Peach, Thomas, M.D. Loughborough, Leicestershire
Pook, Mr. R. R. Surgeon, Great Ormond Street
Porter, Mr. Charles—to East Indies
Poynder, G. Esq. Gloucester
Preston, W. C. Newcastle upon Tyne
Rees, Mr. William, Surgeon, Canada
Ryan, Dr. Michael, Kilkenny
Skelton, Dr. Princes Street, Cavendish Square
Sutton, Rd. Member of the Royal College of Surgeons, and Licentiate of the Honble. Society of Apothecaries' Hall
Tapp, Mr. William, Surgeon, Dorchester
The Library of the Royal Westminster Infirmary
Watkins, George Edward, Student, London
Wight, Mr. A. Surg. &c. Watt's Terrace, Kent Road
Wise, Thomas A. M.D. Surgeon, London
Wood, Dr.

N.B. It may be observed, that Names, Books, Letters, &c. received after the 15th of December, have not appeared, or been acknowledged in this Number.

MR. BATTLEY ON OPIUM.

To the Editor of the Medico-Chirurgical Review.

SIR,

In submitting to your attention the annexed list, I beg leave to remark, particularly, upon the properties of the Liquor Opii Sedativus. This medicine possesses the narcotic and sedative, without the exciting property of Opium. It diminishes the action of the heart and arteries, lessens the sensibility of the nervous system, and allays irritation, pain, and cough, even in diseases in which the inflammatory diathesis prevails.

I am induced to solicit your attention more especially to this preparation, not only in consideration of its great and acknowledged importance in the treatment of disease, but from the circumstance of the medicine having been impaired in its reputation by the introduction of a preparation under the same name. This preparation, upon analysis, I find to be—

Diluted ligneous acid, holding in solution morphium.

Colouring matter, which, upon being precipitated, is again soluble in dilute liq. potassæ, but not in water or alcohol.

A gum resin which assimulates to matter precipitated from tincture of henbane, and a small portion of resin of a different description, but which I cannot particularly define.

Comparing this mixture with the Liquor Opii Sedativus, which I prepare, it may be proper to add, that the latter does not contain *morphium*, or if any, a very trifling portion only, and applying these preparations, severally, to the animal economy, I am of opinion that the first, by the resinous and other matter combined with morphium, would produce nervous irritation: and experience shows that the second *allays that affection* to an extent entitling it to a high character in *diseases of irritation*.

I am, Sir,

Your obedient Servant,

RICHARD BATTLEY.

FORE-STREET, CRIPPLEGATE, LONDON,
DECEMBER 20th, 1824.

Extra Limites.

Acetum Colchici
Scillæ
Acidum Aceticum Per Retort
Fortissimus
Benzoicum
Citricum
Hydrocyanicum
Muriaticum
Nitricum
Nitrosum
Sulphuricum S. G.
Tartaricum
Æther Sulphuricus S. G.
Rectificatus S. G.
Alcohol S. G.
Aloes Spicatæ Extractum
Alumen Exsiccatum
Ammoniæ Murias
Subcarbonas
Antimonium Tartarizatum
Antimonii Sulphuretum Præcipit
Aqua Cassiæ
Cinnamomi
Rosæ
Argenti Nitras
Baccæ Capsici
Balsamum Copaibæ
Styracis
Bismuthi Subnitras
Cambogia
Camphora
*Cantharis
Castoreum
Catechu
Ceratum Sabinæ
Saponis
Cinchonine
Colocynthidis Pulpa
Confectio Amygdalarum
Aromatica
Aurantiorum
Opii
Piperis Nigri
Rosæ Caninæ
Gallicæ
Sennæ
Cortex Aurantii
Canellæ
Cascarillæ
Cinchonæ Cordifoliæ
Lancifoliæ
Oblongifoliæ
Cinnamomi
Cuspariæ
Limonum
Mezerei
Rad. Sarsaparillæ
Coccus
Croci Stigmata
Cubeba
Emetine
Emplastrum Ammoniaci
cum Hydrargyro
Belladonnæ
Conii
Cumini
Galbani Compositum
Emplastrum Hydrargyri
Cantharidis
Opii
Sedativum
Picis Compositum
Plumbi
Resinæ
Saponis
Stramonii
Thuris Compositum
Extractum Aconiti
Aloes Purificatum
Anthemidis
Belladonnæ
Capsulis Stramonii
Cascarillæ
Cinchonæ
Resinosum
Colchici Aquosum
Acetosum
Per Expressum
Colocynthidis
Compositum
Conii
Elaterii
Gentianæ
Gratiolæ
Hæmatoxyli
Hellebori Nigri
Humuli
Hyoscyami
Jalapæ
Resinosum
Lactucæ
Virosæ
Mezerei Corticis
Nucis Vomicæ
Resinosum
Opii
Papaveris
Rhei
Sarsaparillæ
Corticis
Semina Stramonii
Tabaci
Taraxaci
Uvæ Ursi
Ferri Ammoniatum
Subcarbonas
Sulphas
Tartarizatum
Folia Belladonnæ
Conii
Digitalis
Hyoscyami
Sennæ
Stramonii
Uvæ Ursi
Gummi Acaciæ
Ammoniaci
Assafœtidæ
Benzoini
Galbani
Guaiaci
Kino
Myrrhæ
Sagapeni

Extra Limites.

Gummi Scammoneæ
Tragacanthæ
Hydrargyri Nitrico Oxydum
Oxyd. Cinereum
Rubrum
Oxymurias
Submurias
Sulphuretum Nigrum
Rubrum
Hydrargyrum
cum Creta
Præcipit Album
Purificatum
Hydriodas Potassæ
Iodine
Lin. Camphoræ Compositum
Saponis Compositum
Linteum
Liquor Ammoniæ
Arsenicalis
Ferri Alkalini
Morphiæ Acetatis
Citratis
Plumbi Subacetatis
Potassæ
Magnesia
Magnesiæ Subcarbonas
Sulphas
Manna
Moschus
in Granis
Morphia
Acetas
Oleum Amygdalarum
Anethi
Anisi
Anthemidis
Carui
Caryophyllorum
Cassiæ
Cinnamomi
Juniperi
Lavandulæ
Menthæ Piperitæ
Viridis
Myristicæ
Pimentæ
Pulegii
Ricini, E. I.
W. I.
Rosmarini
Sabinæ
Terebinthinæ
Rectificatum
Opium
Opii Extractum Sedativum
Resinosum
Liquor Sedativus
Oxymel Scillæ
Pilulæ Aloes cum Myrrha
Ferri Compositæ
Galbani
Hydrargyri
Submur. Comp.
Saponis cum Opio
Scillæ Compositæ
Plumbi Acetas
Potassæ Acetas
Carbonas
Subcarbonas
Sulphas
Sulphuretum
Supertartras
Tartras
Pulvis Aloes Compositus
Antimonialis
Arsenici
Belladonnæ
Calumbæ
Cascarillæ
Cinchonæ Cordifoliæ
Lancifoliæ
Oblongifoliæ
Cinnamomi
Compositus
Conii
Colchici
Corticis Sarsaparillæ
Cretæ Compositus
cum Opio
Cubebæ
Digitalis
Guaiaci
Hyoscyami
Ipecacuanhæ
Compositus
Jalapæ
Myrrhæ
Opii
Rhei
Sabinæ
Sarsaparillæ
Scammoneæ
Compositus
cu Calomelane
Scillæ
Sennæ
Tragacanthæ
Compositus
Uvæ Ursi
Zingiberis
Quinina
Sulphas
Radix Calumbæ
Colchici Siccatus
Gentianæ
Glycyrrhizæ
Hellebori
Nigri
Ipecacuanha
Jalapæ
Mezerei
Rhei
Sarsaparillæ
Scillæ Siccatus
Serpentariæ
Zingiberis
Semina Cardamomi
Colchici
Stramonii
Soda Tartarizata
Sodæ Carbonas
Subcarbonas
Spiritus Ætheris Aromat. S. G.

Extra Limites.

Spiritus Ætheris Nitrici, S. G.
Sulphurici, S. G.
Comp. S. G.
Ammoniæ, S. G.
Aromaticus
Colchici
Fœtidus
Succinatus
Armoraciæ Compositus
Juniperi Compositus
Lavandulæ
Compositus
Myristicæ
Spongia Usta
Strychninæ
Sulphur Lotum
Præcipitatum
Syrupus Auraatiorum
Croci
Papaveris
Rhœados
Sarsaparillæ
Scillæ
Mori
Tinctura Aloes
Compositæ
Assafœtidæ
Aurantii
Belladonnæ
Benzoini Composita
Calumbæ
Camphoræ Composita
Cantharidis
Capsici
Cardamomi
Composita
Castorei
Catechu
Cinchonæ
Ammoniata
Composita
Casgarillæ
Tinctura Cinnamomi
Composita
Colchici
Semina Colchici
Conii
Digitalis
Ferri Ammoniati
Muriatis
Gentianæ Composita
Guaiaci
Ammoniata
Humuli
Hyoscyami
Iodinæ
Jalapæ
Kino
Myrrhæ
Opii
Camphorata
Rhei
Scillæ
Sennæ
Strychninæ
Stramonii
Valerianæ
Zingiberis
Unguentum Hydrargyri Fortius
Nitratis
Hydriodatis Potassæ
Cantharidis
Vinum Aloes
Antimonii
Colchici
Semina
Ferri
Ipecacuanhæ
Nicotianæ
Opii
Veratri
Zinci Oxydum
Sulphas

Contents

OF

No. 4. Vol. II. (NEW SERIES) for APRIL 1825.

[*No. 20, ANALYTICAL SERIES.*]

Art. I.

A Practical Treatise on Hæmorrhoids, Strictures, and other Important Diseases of the Rectum and Anus, &c. By Geo. Calvert, Esq. 273

II.

OPHTHALMIA.

1. Mr. Thomas Hewson on Ophthalmia accompanying the Secondary Forms of Lues venerea 305
2. Dr. O'Halloran on Acute and Chronic Ophthalmia.....

III.

Recherches Anatomico-Pathologiques sur la Médécine Pratique, &c. By M. Tacheron, M. D. 326

IV.

Dr. Duncan, Jun. on Diffuse Inflammation of the Cellular Texture, &c. 335

V.

Mr. Richard Phillips' Translation of the New Pharmacopœia, with Notes, &c. 356

VI.

A Treatise on Mental Derangement. By Francis Willis, M.D. 360

VII.

A Treatise on Moxa, as applicable more especially to Stiff Joints, &c. By James Boyle, Esq. 377

VIII.

PRACTICE OF MEDICINE.

1. Dr. Uwins' Compendium of Theoretical and Practical Medicine
2. Dr. Dawson's Nosological Practice of Physic, embracing Physiology 382

IX.

Dr. Blundell's Physiological and Pathological Researches-- 400

X.

Dr. Buchan on Symptomatology 418

XI.

Dr. Cox on Acute Rheumatism 428

XII.

Quarterly Periscope

OF

PRACTICAL MEDICINE;

BEING

THE SPIRIT OF THE MEDICAL JOURNALS,

FOREIGN AND DOMESTIC.

I. PHYSIOLOGY.

1. M. Martinet on the Vital Power of Resistance (Idiosyncrasy) 433
2. Dr. Roesler on Resuscitation in suspended Animation.... 440
3. On the Etiology of Goitre, Cretinism, &c. 442

II. PATHOLOGY.

1. M. Andral on Fatal Dyspnœa 444
2. Dr. Chapman on Inflammation of Veins 447
3. M. Nauche on Irritation and Inflammation 451
4. Mr. North on a Peculiar Spasm in Children 452
5. Post-mortem Appearances in the Case of Dr. Henning.... 457
6. Fatal Asthma from Affection of the Glottis 458
7. Remarkable Case of Intus-Susception 460
8. M. Cayol's Hospital Reports on Fever, &c. &c. 460
9. Tympanitic State of the Pericardium 465

III. SURGERY.

1. Supposed Fracture of the Basis Cranii 466
2. Mr. Yeatman on the Treatment of Hernia 467
3. Dr. Robertson on Iritis 468
4. Mental Imbecility from Injury of a Nerve 469
5. Mr. Melin on Ophthalmia 470
6. Mr. Snell's Case of Anchylosis of the Jaws 472
7. The Recto-Vesical Operation of Lithotomy 473
Dr. Muter's Description of the Operation 474
8. Dr. Martland on Staphyloma treated by Tapping 475
9. Dr. Barnes' Account of the Knife-Eater's last Illness 476
10. Dr. Thompson on Retention of Urine 477
11. Mr. Money on Paracentesis Capitis in Hydrocephalus 478
12. History of Paracentesis Thoracis, with Cases (Retrospective) 479

IV. THERAPŒIA.

1. Emetics in Hæmatemesis 481
2. Dr. Hosack's Hospital Reports
Amenorrhœa, Intermittent Fevers, Phthisis, Chronic Rheumatism, Syphilis 482
3. Dr. Davies on Puerperal Peritonitis 483
4. Dr. M'Dowel on Buchu Leaves 485
5. Mr. Creighton on Tartar Emetic Ointment in Epilepsy 486
6. Mr. Ferrall's Case of Poisoning by Nitre 487
7. Dr. Barker on Sulphate of Quinine 488
8. Dr. Borthwick on the Effects of Constipation 489
9. Dr. Beatty's Case of Severe Affection of the Head 490
10. Dr. Begbie on Datura Stramonium 491
11. Peculiar Convulsion in Children 493
12. Dr. O'Beirne on Tobacco in Dysentery 495
13. Professor Recamier and Dr. Fievée on Hydrophobia 497
14. Dr. Godelle on Compression in Ascites 500
15. Dr. Fisher on Hydrocephalus cured by Mercury 501
16. Boiling Bath in Chronic Rheumatism 502

V. MIDWIFERY.

1. On Puerperal Irritability 503
2. Dr. Ollivier on Ascites complicated with Pregnancy 506
3. Preternatural Presentation, with Remarks 507
4. Dreadful Puerperal Fever at Vienna 509
5. On Irritable Uterus 512
6. Dr. Musgrave's Case of Repeated Abortions 513
7. M. Baudeloque's Substitute for the Cæsarean Section 522
8. Dropsy complicated with Pregnancy 523
9. M. Dugés on Puerperal Neuritis 523
10. Case of Separation of the Pubes 526

VI. MEDICAL JURISPRUDENCE.

Culpable Abortion, Trial for 528

XIII.

ANALECTA MINORA, OR MINOR PERISCOPE.

1. Extinction of Fire 530
2. Italian Remedies 530
3. Pressure on the Perineum on Delivery 530
4. M. Bally's Report on Certain Medicines 530
   1. Sulphate of Quinine 530
   2. Acetate of Morphine 531
   3. Extract. Lactucarii 531
   4. Nitrate of Potash in Dropsy 531
5. Mr. Bushell on Flowers of Colchicum 531
6. Baynton's Method of Treating old Ulcers, not new 532
7. Mr. Battley on the Volatile Oil of Cubebs 532
8. Intra-Uterine Vociferation 532

XIV.

Bibliographical Record 533

XV.

EXTRA-LIMITES.

I. Mr. Wise on the less frequent Use of the Trephine 536
II. Dr. Gregory's Report from the Small Pox and Vaccination Hospital 551
III. Mr. Waterworth on the Sand-Rock Spring, Isle of Wight 555
IV. Crown Life Assurance Company 556
V. State of the Westminster Medical Society, Great Marlbro' Street 558
VI. Mr. Reeve's Tooth-Instrument 560
VII. Dr. Smith on the Duty of a Coroner respecting Medical Evidence 561

XVI.

INTELLIGENCE, CORRESPONDENCE, &c.

Establishment of a General Infirmary at Chichester 564
Factitious Mineral Waters at Brighton 564
Death of Dr. Chisholm 565

Additional Subscribers 566

THE

MEDICO-CHIRURGICAL REVIEW.

Vol. VI.] Analytical Series. [No. 20.

"Nec tibi quid liceat sed quid fecisse decebit
"Occurrat, mentemque domat respectus honesti."

Vol. II.] APRIL 1, 1825. [No. 4.

[NEW SERIES.]

I.

A Practical Treatise on Hæmorrhoids or Piles, Strictures, and other important Diseases of the Rectum and Anus: being, with some Additions, a Treatise, to which the Jacksonian Prize was adjudged by the Royal College of Surgeons. By George Calvert, Member of the Royal College of Surgeons of London, and of the Medico-Chirurgical Society, &c. Octavo, pp. 259, one plate. Sept. 1824. Callow & Wilson.

Mr. Calvert's work consists of seven chapters, *viz.* On Hæmorrhoids—Strictures of the Rectum—Morbid Contraction of the Anus—Prolapsus Ani—Fistula in Ano—Ulcers of the Rectum—and, finally, Excrescences about the Anus.

It is rather remarkable that, in this country, where monographs abound on almost every disease, there should be no regular treatise on the subject of hæmorrhoids—at least, none that has kept its place as a standard of reference. The most able and elaborate treatise which we know of, is that of Montegre—in the 20th volume of the *Dict. des Sciences Medicales*, and, also, in a separate and enlarged form. We strongly suspect that Mr. Calvert is not a little indebted to Montegre's work, though he makes little mention of that masterly performance. In this article, we shall draw from various sources, as occasion may require.

Definition. Various definitions have been given of this disease—most of them bearing reference to the etymology, and making the *sanguineous discharge* the prominent feature of the

disease. Hippocrates, as every body knows, has taken this view of the case—"excretiones per ora venarum quæ sunt in ano hæmorrhoidas vocant." Mr. Calvert defines the complaint thus:—a morbid state of the vessels of the rectum and anus, with pain, tension, &c. accompanied, or followed by the formation of tumours in those parts, and a flow of blood, frequently periodical." Montegre endeavours to separate the *accessory or accidental* symptoms from the *essential* feature of the disease, which he considers, (and we think justly so,) as a sanguineous fluxionary determination to the vessels of the rectum and anus, bearing no small analogy to the menstrual afflux to the uterus in the other sex. "Il n'est qu'un seul symptôme de constant dans les hæmorrhoides, c'est une tension, une pesanteur plus ou moins douloureuse du siége et des parties environnantes, produites par la fluxion qui s'y est formée: *cette fluxion est l'affection essentielle*,* et tout le reste ne doit être consideré que comme accessoire ou accidentel."

"In consequence," says Montegre, "of causes which it is often impossible to ascertain, there is established, at certain epochs, a sanguineous determination (fluxion sanguine) towards the extremity of the rectum; whence results, at first, simply a sense of tension and weight. This state, which has nothing painful in it, and which is often scarcely noticed, continues three or four days, and then subsides. Afterwards it is renewed, at longer or shorter intervals;—frequently, but not always, terminating in a discharge of blood of a bright red colour, spread over, but not mixed with, the fæces. This blood is generally produced by a kind of exhalation from the mucous membrane of the rectum, without any trace of erosion in the tissue. After frequent, and sometimes after a few repetitions of this fluxionary movement, tumours of greater or less volume, and more or less painful, begin to appear."†

Let us compare this with Mr. Calvert's description of the first approach of hæmorrhoids.

"The first attack of hæmorrhoids is generally very slight, and is not preceded by any marked constitutional derangement. There is some sensation of weight or fulness about the sacrum, and extremity of the rectum, extending, perhaps, to the perineum; and the sensibility of the bladder, urethra, &c. is sympathetically increased. This state continues for a short time, perhaps for two or three days, when in many cases a slight flow of blood takes place during the expulsion of the fæces, and smears their surface of a bright red colour. This flow never occurs in some individuals, particularly during the primary attacks; but when this is the case it forms,

* "Hence it would appear, (says Mr. Calvert) that the immediate cause of hæmorrhoids consists in a preternatural determination of blood to the vessels of the rectum." P. 10,

† Montegre, p. 443, Dict. des Sciences Med.

as it were, a crisis to the complaint, and the above mentioned symptoms disappear at an earlier period.

"After a greater or less interval the same train of symptoms are generally renewed, but in a greater degree, acquiring strength by repetition. The sensations of weight, tension, &c. are more perceptible; some sympathetic phenomena are observed; the blood is discharged in greater quantity, and tumours of varied size begin to appear within or around the anus." 9.

The similarity of these two passages appears to us something more than accidental. In an eclectic treatise, however, Mr. Calvert is justified in drawing his materials from such sources as appear to him the best. He could not apply to a better store of facts, or to more accurate descriptions of phenomena, than are presented in the monograph of Montegre.

That hæmorrhoids are not a merely local affection, must be admitted by every one who has felt the complaint in his own person, or accurately observed it in others. The venerable Pinel enumerates among the general symptoms of an approaching hæmorrhoidal attack—"slight horripilation in the back and loins; occasional numbness of the lower extremities, hardness and contraction of the pulse, paleness of the countenance, dullness of expression in the eyes, dryness of the mouth, scantiness and high colour of the urine, debility of stomach, flatulence, frequency of inclination to stool and urine, sense of bearing down about the anus and perineum, occasional mucous discharge from the rectum."—*Nosog. Philos. Vol.* II. *Cinquiéme Ed.* Who can doubt that these symptoms, so accurately portrayed, create a considerable "fluxionary movement" (as Montegre would express it) in the system, *preparatory* to the local demonstration, and not merely symptomatic of the local affection? Mr. Calvert, however, who gives nearly a copy of Pinel's symptomatology, attributes the *constitutional* phenomena to the influence of the topical portion of the complaint.

"In weak and irritable constitutions the influence of the local affection bears upon the aspect of the patient; the face is paler than usual, the eye appears sunk, from the dark circle beneath it; the abdomen becomes tumid, the feet swell, and, in addition to these appearances, there is a sensation of coldness with shivering, hard pulse, dryness of the mouth," &c. 9.

We grant, indeed, that when the local affection has continued a long time, and is accompanied with much organic derangement, pain, or profuse discharge of blood, the constitution will evince symptoms of sympathy, such as are above described. But this is not the stage of things at which we are

arrived, in this early part of the dissertation. In short, so far as we have yet described of the hæmorrhoidal movement in the system, it is to be regarded as a salutary, rather than a morbid affection. As we before observed, this movement only continues a few days and then subsides, leaving the person in better health than before.

Hæmorrhage, Tumours, &c. We have shown that the discharge of blood is not essential to the hæmorrhoidal movement in the system; but the periodical return of this movement soon produces both that and several other phenomena, which are now to be considered. The hæmorrhage, in simple cases, is, as was before observed, by a kind of exhalation from the vessels of the rectum. Sometimes we see the blood spin out like a fine thread of red silk, when the patient strains at stool. Even this is not necessarily from a ruptured or patulous vessel, but may proceed from a dilated pore, as it were, of the mucous membrane. The jet stopped and the part wiped clean, and examined, even with glasses, no vessel can be seen. In more advanced states, however, and especially where the local affection is become complicated with permanent tumours, ulcerations, or other effects, the hæmorrhage is often from ruptured vessels. The quantity of blood discharged in hæmorrhoidal affections is often prodigious, and frequently produces great weakness for a time. This hæmorrhage assumes two forms—an active and a passive. The former, when moderate, is always salutary. It is characterised by some increased action in the pulse and temperature, and a relief of unpleasant sensations after the discharge. It does not, in general, take place but when the person is at stool, and does not accumulate, during the intervals, in the intestine. When the discharge is very large in quantity, it weakens the patient, and thus passes occasionally into the passive form, where it has proved not only dangerous, but sometimes fatal. One of the most frequent causes of these excessive sanguineous discharges from the hæmorrhoidal vessels, Montegre asserts to be, a common, but injudicious measure resorted to as a remedy—the application of leeches to the anus. *Passive* hæmorrhage from the hæmorrhoidal vessels may result from general or local causes. In the first case, it is characterised by debility, which debility is increased by the discharge—by a weak pulse—by languor of all the functions. It is not preceded by the tension, weight, and other symptoms which announce the active fluxionary movement—and it continues until proper measures are used to arrest it. The local causes of this passive discharge are, laxity of the vessels from repeated attacks of the active form—rupture of their coats—or organic derangements of the parts, as tumours, ulcers, &c.

It is not necessary, now-a-days, to discuss the nature of the fluid discharged. It is common blood from the *exhalents* of the part.

Hæmorrhoidal Tumours. These are considered by Montegre as forming no *essential* part of the disease, (if it deserve that name) but a mere consequence or effect of it. Passing over the vague and erroneous notions which were entertained by the ancients, and even till our own days, respecting the hæmorrhoidal tumours, we shall here only state what modern anatomists have ascertained.

"There are two kinds of hæmorrhoidal tumours, differing very materially, both in their appearance and structure. The first that I shall speak of are by much the most common, and constitute what are commonly termed piles. They are first seen in the form of small fleshy tubercles, generally of a brownish or pale red colour, and situate within the anus, or descending from the rectum. On examining them with the finger, they are found to have a somewhat solid and spongy feel, and, when cut into, present a surface more or less compact, and bloody, from which blood oozes, leaving the texture pale, and more relaxed.

"When these tumours are more external they are paler, and generally, also, more elastic and transparent; appearances which arise from the nature of the skin that covers them, and the serum with which their internal tissue is often infiltrated. These are sooner produced, and disappear more rapidly than the former.

"These tumours very often contain a central cavity, filled with fluid, or coagulated blood, which is of a brighter or darker red, according to the length of time it has been effused. The lining of the cyst is either smooth or granulated; and by the assistance of the microscope in the dead subject, after having forced into the arteries by which they are supplied with blood some fine and coloured injection, a few minute vessels may be traced, through which the fluid gradually exudes into the above mentioned cavity, but there is evidently no connexion whatever with any of the larger vessels.

"This cavity is usually small, not exceeding the size of a pea, but it is sometimes large enough to contain several drachms of blood.

"More generally, however, there is no regular cyst, but the substance of the tumour is infiltrated with blood, which eventually becomes dark and coagulated. This blood does not appear to be the result of common extravasation, since it is not generally diffused, as in ecchymosis, but confined in separate patches of different shades, presenting a variegated aspect when the tumour is cut into; on closer examination it appears as if it were contained in dilated vessels, which traverse the tissue in the direction of the long axis of the rectum, so that, if the tumid part be divided longitudinally, they present numerous dark streaks through the substance, but, if the section be made transversely, small, roundish specks only appear.

"The manner in which the common hæmorrhoidal tumour forms is in general pretty uniform. The patient is first made sensible of its development by a peculiar pricking, stinging sensation, generally within or around the margin of the anus; and, on applying the finger to the part, it is felt slightly elevated, as if some newly-formed substance were forcing its way to the surface.

"The increase of these tumours, when once they have become in some degree permanent, does not take place in every direction; they elongate rather than expand, the body being usually of a conical form, and larger than the neck, which arises probably from their relative position with the surrounding parts. Sometimes more or less blood is exhaled from their surface; on other occasions a serous fluid only is exhaled, or they remain nearly dry; but in either case they generally disappear in a short time, and return again at an uncertain or regular period, increasing in size, and becoming firmer in texture with each repetition." 25.

This pathology agrees substantially with the investigations of the best foreign writers. Mr. Calvert quotes several modern and living writers of this country as still entertaining erroneous notions respecting the true nature of these tumours, some of which we shall notice presently.

It is well known that after repeated attacks of hæmorrhoids, especially if the tumours become strangulated by the pressure of the sphincters, they acquire a solidity and permanence that render them inconvenient, and sometimes very painful, leading to inflammation, ulceration, or, what is more common, a troublesome prolapsus ani.

"This permanent state of the tumours is owing partly to the development of the capillary vessels, gradually obliterating the interstices; and, in part, to the effused blood coagulating, and becoming organized; and hence the production of the condylomatous tumours, and the foundation of that irregular mass, which is found around the anus in those who have been long subject to hæmorrhoids, commonly termed the hæmorrhoidal excrescence, all of which are permanently solid, and can only be removed by the knife or the ligature." 27.

Such is the general character and such the structure of piles which, even to this day, are thought by many to be no more than dilated veins.

"Piles or hæmorrhoids," says Mr. Charles Bell, "are produced by a distention of the veins of the anus, and of the gut near the extremity. In a short time the distended veins are enveloped with a fleshy covering. The distention of the vessels causes a thickening of their coats, and the injury being still continued, there is a deposite of coagulable lymph around them; besides, there is sometimes an extravasation of blood which becomes organized.—Thus the hæmorrhoidal tumours become a firm fleshy excrescence, with the extremity of the vein concealed within. That vein, how-

ever, is burst, from time to time, and discharges blood; for when, by the continuance of the costive state of the bowels, the patient is forced to strain at stool, the blood is spurted out to some distance by the bursting of the extremity of the vein."

Sir Everard Home has viewed the structure of hæmorrhoidal tumours in the same light, and so did Dr. Baillie. Although more recent and more accurate investigation have proved these illustrious anatomists to be wrong, taking the thing in a general point of view, yet there are not wanting proofs that the pathology last detailed is *sometimes* correct, as the following passage from the venerable Pinel* will show.—"Lors de l'inspection cadaverique d'une femme anciennement hæmorrhoidaire, je remarquai quelques tumeurs vers l'anus, et des bosselures d'un rouge foncé dans la membrane muqueuse. On enleva avec soin cette membrane, et on trouva au dessous des tumeurs remplies d'un sang caillé. L'interieur de ces petites tumeurs se continuait dans de portions des vaisseaux qui avaient leur calibre ordinaire, ce qu'on reconnaissait en introduisant un stylat. Ces vaisseaux qui avaient toute l'apparence des veines presentaient alternativement un etat de dilatation et de leur calibre habituel. La direction de ces vaisseaux se continuait dans tous les sens, ce qui formait un vrais lacis vasculaire. Il me parait donc que ces tumeurs hæmorrhoidales n'etaient que des assemblages de varices ou des dilatations partielles de differentes portions." *Nos. Philos. tom.* ii.

Mr. Calvert remarks, that there is still one circumstance that has been overlooked, namely, the different appearance of these tumours in the living subject and in the corpse—a difference which he thinks has given rise to hasty and false conclusions.

"In examinations after death we almost invariably find, that where tumours exist within the anus or extremity of the rectum, they are found either to contain distended veins, or a condensed cellular tissue, but have rarely, unless where death has been produced suddenly, that humid, spongy substance, which is often observed during life, and which proceeds from the infiltration of fluids and the distended state of the capillary vessels. The cause of this is, I think, sufficiently obvious. Granting that, in the generality of such cases, there is an increased action, and greater development in the capillary vessels of the part, it follows that, in most cases, the degree of swelling must be almost wholly, or in part, owing to the accession of blood and white fluids to the part. Now, as this accumulation of fluids is the consequence of vitality, it must necessarily diminish with, or be altogether reduced by long protract-

* This case is erroneously attributed to Richerand by Mr. Calvert at page 43.

ed disease and death; and this is precisely the case with regard to the tumours that have already been described.

"In the dead subject then, these tumours which, during the hæmorrhoidal paroxysm, were fully distended, are found more or less collapsed, and the veins, which, prior to death, constituted but a small part of the swelling, and ramified chiefly between the body and envelopment, now occupy the centre, and are, both from their colour and size, the first objects that arrest the attention, when the latter part is removed for the purpose of investigating their nature. Hence it is that, even in cases where the above mentioned swellings were formed during life by a congestion in the capillary vessels, the veins on dissection are often found enlarged, forming, together with the fine skin of the anus, or the villous coat of the rectum, the chief parts of the tumour." 36.

In other cases, where these tumours have been of long standing, a new substance is formed—the intestines are filled up from repeated accessions of inflammation, by which the parietes of the minute vessels are strengthened and elongated, and new matter deposited. Under these circumstances, the volume of tumours, not being very materially increased by the accession of circulating fluids, continues nearly stationary after the phenomena of vitality have ceased.

Hæmorrhoidal Inflammation. This is no rare occurrence. The hæmorrhoidal tumours, when once formed, generally go on increasing with each paroxysm, and at length, by their size, cause great inconvenience in going up and coming down past the sphincter, when the patient is at stool. In this state they may become inflamed, and are then attended with exquisite pain of the throbbing kind, and accompanied by darting sensations at intervals, as if they were pricked with a lancet.—"These symptoms," Mr. Calvert truly observes, "are much aggravated during the expulsion of the fæces, when the patient's sufferings often beggar description." There is more or less of symptomatic fever, and the whole system is exceedingly irritable. The inflammation may run so high as to end in suppuration or sloughing, with great sympathetic irritation of the bladder. Mr. Calvert illustrates this part of the subject by the following case.

"Mrs. ——, aged 22, after having for some time great inconvenience from the presence of some hæmorrhoidal tumours within the rectum, was attacked at the usual period of their enlargement with acute throbbing pain in the rectum, quick bounding pulse, retention of urine, and other symptoms of local and general irritation. A physician being called in, leeches to the anus, purgatives, &c. were prescribed, but the symptoms still continued to increase. At this time I saw her; her countenance was suffused, and distorted from pain, and although a woman of strong mind and

great fortitude in general, she could not, in the present instance, avoid expressing her sufferings by loud and continued shrieks, particularly when the bowels were moved. The slightest motion of the body was productive of the most exquisite torture ; and such was the sensibility of the inflamed parts, that an attempt to arrange the bed-clothes, or a light tread over the floor, added considerably to her sufferings.

"From the account of the nurse it appeared, that two dark-looking tumours had appeared at the anus, but at this time they were not visible ; and the extreme sensibility of the parts rendered it quite impossible to make any satisfactory examination.—A large quantity of blood was taken from the arm, and at the end of two days the violence of the pain had so far abated as to allow me to ascertain the state of the rectum. On carefully introducing my finger I could distinctly feel some loose soft bodies, partly detached from the mucous surface, and a few days after these were expelled without the slightest hæmorrhage. Three of these bodies, both in form and colour, very much resembled the common leech when partly distended, and appeared to consist of coagulated blood, enclosed by a dark membrane, which was too much disorganized to admit of any opinion being formed respecting its nature ; another was of a rounder form, and appeared to have contained pus." 50.

Leucorrhœal Discharge. When mucous membranes are in a state of inflammation, or even irritation, it is their nature to pour out, first a thin acrid discharge, and after some time a mucus glazy secretion. This takes place very generally when hæmorrhoids have arrived at a certain height, and is much complained of, as soiling the linen, and keeping the patient uncomfortable. This is considered by Montegre as a veritable catarrh of the rectum.

Fissures. It not unfrequently happens, that when the anus is much obstructed by hæmorrhoidal tumours, a rupture of a portion of membrane takes place from the passage of indurated fæces, and the daily motion of the parts, together with the contact of excrementitial substances, prevent its healing. In consequence of this state of things, an ulcer is formed of a painful irritable nature, which gives the patient great suffering, especially after each motion. This naturally brings us to the subject of—

Hæmorrhoidal Pains. These are of different kinds, and are very minutely investigated and distinguished by Montegre. He classes them under four heads, viz.—1st, Those resulting from active inflammation.—2d, Nervous pains.—3d, Pains from fissures or ulceration—and 4th, Pain from chronic inflammation, or catarrh of the mucous membrane of the rectum.

1. The pains from active inflammation have already been described, when speaking of inflammation itself. They are distinguished by the accompaniments of heat, throbbing, tension, &c. and vary in the degree of intensity, from the most trifling to the most horrible sensations, ending even in gangrene.

2. *Nervous Pain.* This, Montegre observes, has not been noticed by any writers on hæmorrhoids, although it is one of the most afflicting accompaniments of the disease. Our author first described it in the GAZETTE DE SANTE, ten or twelve years ago, since which, M. Boyer has noticed it, and proposed the entire division of the sphincter ani as the remedy. The latter viewed it as depending on a fissure (Crevasse) in the rectum, producing that painful affection, spasmodic constriction of the anus. Montegre, who has seen the complaint frequently where no fissure or constriction existed, regards it as a symptom which may supervene on several affections of the rectum, but especially on hæmorrhoids. It takes place without any evident strangulation or inflammation, and, what is curious, it is relieved by *pressure.* It is characterized by intermissions, and by the rapidity with which augmentations or diminutions of the pain take place. Like the generality of nervous affections, it leaves the patient in the most extreme state of inquietude and depression. These pains frequently succeed inflammatory affections of the parts, and often remain when the cause that produced them is removed. They will continue for months or years—they will even become permanent, and embitter the remainder of life!

3. *Pain from Fissures.* It is to be borne in mind that fissures or rhagades will occasionally exist unaccompanied by pain. More frequently, however, they bring with them this disagreeable accompaniment. They will be recognised by the following symptoms.

"The patient experiences, on going to stool, a slight pain, the seat of which is always the same. This pain is, at first, so slight as to be scarcely perceptible. But after an interval, varying from a few minutes to an hour or more, it assumes an intensity that is compared by the patient to what might be expected from the introduction of a red-hot iron into the anus. This anguish persists generally till the patient falls exhausted into a sound and prolonged sleep, from which he awakes free from pain. The state of tranquillity continues till he next has a stool, when he is destined to go again through the same train of sufferings. When this complaint has continued for a considerable time, the patient becomes affected with an habitual despondency, which is strongly depicted in his countenance.

He emaciates rapidly—often avoids eating from the fear of having a motion. These fissures are sometimes cured spontaneously by the accession of acute inflammation ending in suppuration of the hæmorrhoidal tumour, at the base of which was situated the fissure. Sometimes also nature cures the disease by depriving the parts of their morbid sensibility, in a manner and by means unknown to us at present."—*Montegre.**

4. *Pain from Chronic Inflammation.* This differs but little from the species of suffering just described, except that the pain cannot be referred to a single point. It is more diffused, and is generally, but not always, accompanied by a mucous discharge or leucorrhœa from the parts. Like the distressing sensations from fissure, it succeeds each evacuation of the bowels, and is only relieved by sleep, which it too often prevents during the whole night. In that case the patient is doomed to suffer without interruption till the succeeding night!

Contraction of the Anus. This is an accident consecutive of hæmorrhoids, and may depend on three different causes.

1st. The accumulation and re-union, says Montegre, of tubercles around the lower part of the gut, and which protrude when the patient goes to stool, are very capable of producing a diminution of the passage, and difficulty of voiding the fæces, especially when they are hard. Fissures are very liable to form under these circumstances.

2ndly. A progressive induration of the cellular tissue around the extremity of the rectum occasions a gradual

* A medical gentleman of this metropolis suffered, nearly two years, from this complaint, and experienced exactly the symptoms described above by Montegre. The fissure, or rather a small chronic ulcer, with hard raised edges, and a smooth surface, was discovered between two hæmorrhoidal tumours, that always came down on going to stool, by an eminent surgeon, who removed the ulcer by excision. The operation was excessively painful, and the removal of the hæmorrhoidal tumours themselves was not deemed advisable at that time. A severe inflammation followed—the hæmorrhoidal tumours protruded—became strangulated—and sloughed. The sufferings of the patient, during the strangulation and sloughing of the piles, which occupied five or six days, were indescribable. A large raw surface was left, and two fistulous sinuses were formed in the gut, which required two successive operations afterwards. These all ultimately healed in the course of two months, and the patient has fortunately got completely cured of an hæmorrhoidal affection that had harassed him for many years, and which, for the last two years, had rendered his life a burthen to himself. During those two years he never passed a motion of calibre larger than a finger without exquisite torture; but since the operations, the gut has become nearly as free as at any period of his life. The complaint had produced much irritability of the bladder, which troublesome symptom has also disappeared with its cause.—*Reviewer.*

decrease of calibre in the gut, of an indolent nature, and which is borne by the patient, till the difficulty of voiding the fæces arrives at a certain height, when application for relief is made.

3rdly. *Spasmodic Constriction of the Anus.* This orifice, like most other natural passages in the body, is liable to spasmodic constriction, which here becomes a formidable and painful affection, from the nature of the functions of the part. It is to M. Dupuytren (observes Montegre) that we are indebted for the light which has been thrown on this complaint, of which he has seen many examples. The patients, in every instance, were what has been called of highly nervous temperament. As to the local affection, the sphincter ani is contracted with such force, that the fæces, when inclining to solid, are forced into the shape of small cylinders, and passed with intense pain. The same pain is experienced when the finger is introduced, with the view of ascertaining the nature of the disease. In several cases which M. Dupuytren examined with the greatest care, there was neither fissure or inflammation to account for the pain. The eminent surgeon in question does not consider this curious affection as necessarily connected with a hæmorrhoidal disposition. He has found it in other natural openings of the body. Montegre, on the other hand, has sometimes seen it follow or accompany piles.

4thly. The fourth and last source of hæmorrhoidal pain is connected with *ulcerations*, *abscesses*, *fistulæ*, &c. of which it is unnecessary to say any thing in this place.

Hæmorrhoidal Tenesmus and Prolapsus Recti. These are common and well known consequences of the disease under consideration. The afflux of blood to the parts causes a frequent nisus, or false desire to stool, and these repeated efforts produce, in the end, a prolapsus of the inner membrane of the gut. This protrusion, according to M. Chaussier's observations, is often formed by a kind of invagination of a portion of the bowel, a circumstance that merits attention, when the operation of removing the parts is contemplated.

Induration of the cellular tissue, and even scirrhus and cancer are, Montegre thinks, too often the melancholy consequences of repeated attacks of hæmorrhoidal inflammation.

Before proceeding to the etiology of the disease under consideration, we shall just enumerate the species into which Montegre divides hæmorrhoidal affections, viz. 1st, Hæmorrh. cœcæ, or blind piles—2ndly, H. fluentes, or sanguinolentæ—3dly, Hæm. tumentes—4thly, Hæmorr. dolentes—5thly, Hæ-

morr. cum contractione ani—6thly, Hæmorrh. cum procidentiâ ani—7thly, Hæmorrh. cum irritatione vesicæ urinariæ.—This classification is, we think, very convenient for teaching and acquiring a proper knowledge of the subject. We have already sketched out the nature and symptomatology of these different species, and shall now enter on an important consideration—the causes of hæmorrhoids.

Etiology. The causes are divided, by Montegre, into two classes—the antecedent or predisposing—and the occasional or determining. The *predisposing* are, physical constitution, generally transmitted hereditarily—climate, age, sex—habits and modes of life. Among the *occasional* or determining causes, Montegre reckons, season and temperature—food—constipation—sedentary and particularly literary habits—sombre affections of the mind—certain diseases—pregnancy—too light clothing of the abdomen—abuse of purgative medicines, especially of the aloetic kind—irritating lavements—venereal orgasms—external irritations, &c.

The experienced observer will acknowledge the correctness of this category—and the young practitioner should study the items seriatim. Mr. Calvert's Etiological Chart is nearly the same as Montegre's, but not quite so precise.

"A great variety of causes generally concur to produce hæmorrhoids; some of these are evidently predisposing, others have a more immediate and direct operation.

"Amongst the former, may be classed the peculiar situation of the hæmorrhoidal veins; hereditary disposition; a disordered state of the digestive organs, age, sex, and climate.

"The principal exciting causes of hæmorrhoids are, a torpid state of the bowels, fasting, sedentary habits, violent passions of the mind, irritation from worms in the rectum, from drastic medicines, excessive venery, &c." 52.

On the mode in which hereditary dispositions are transmitted from parent to child, too much has been written—especially as we know nothing at all about the matter, except the fact of such hereditary transmissions existing constantly before our eyes. We greatly fear that even Sir Everard Home's magnificent discovery of nerves in the funis and placenta of a seal, will hardly elucidate this mystery. We see features of the body, and capacities of the mind, unequivocally descending from parent to progeny; and why should not peculiarities of internal organization, with all their dispositions to morbid actions, also descend? We see no reason to the contrary—but examples of the fact are daily presenting themselves to the eye of the medical observer.

Of the natural constitutions of man, the bilio-sanguine is the most disposed towards hæmorrhoids, according to Montegre. Of the influence of climate in disposing to piles, we have little satisfactory evidence. The complaint is more common in this country than in France, but this may be more owing to modes of diet, and passions of the mind, than to climatorial agency.*

The influence of age is more satisfactorily accounted for. Hæmorrhoids generally appertain to middle and advanced life; but then the bilious and melancholic temperament—the depressing passions—the maladies which dispose to piles; all these are the sad prerogative of the epoch in question. At this period, determinations of blood naturally take place towards the abdominal viscera, having run previously in currents towards the head and chest. In this respect, both sexes are alike concerned—but when the catamenial period has passed, females are necessarily and obviously more disposed to hæmorrhoids, than during the activity of the uterine system. It is a fact, however, that hæmorrhoids are by no means a rare occurrence in young people. We have seen them even in children. The writer of this article was subject to piles, at the early age of 19 years.

Habits of Life. These are, unquestionably, the most prolific of all sources of hæmorrhoidal affections. Inactive life and luxurious nourishment must bring on a train of diseases, or find some outlet for the superabundant fluids. Gout and hæmorrhoids are common consequences of this state of things. Hoffman, who practised forty years in Saxony, observes, that hæmorrhoidal affections had greatly increased in his time, from the progress of luxury and the increase of idleness and sedentary habits. A confirmation of this remark is found among people who have led an active life till a certain period of life, when, on leaving off business, and indulging in repose, they have become, for the first time, affected with piles.

Food. Alimentary substances of a stimulating quality have, in Montegre's mind, the property of disposing to hæmor-

* Mr. Calvert, who appears to have travelled in Greece and Turkey, has the following passage.

"The great frequency of hæmorrhoidal diseases amongst the Turks, may be traced to the indolent habit of sitting during almost the whole day, on warm soft cushions; to the peculiarity of their diet, which, in addition to their general habits, often produces an indolent and torpid state of the bowels; and perhaps, also, to an excessive indulgence in venery." 60.

rhoids—and that, by keeping up an afflux of blood to the digestive organs.

That the excitement of the stomach is *sympathetically* communicated to the colon and rectum is proved by the almost immediate effect of breakfast in producing an action in the bowels, in a state of good health. So the morbid excitement of the same organ by stimulating food and drink, produces a tendency to hæmorrhoids, through the same medium. This subject leads us to extract a passage or two from the work of Mr. Calvert.

"A disordered state of the digestive organs may predispose to the formation of different hæmorrhoidal affections, by producing that state of the constitution which seems to require the presence of a drain, if I may be allowed the expression, or a disordered action in some part of the body. The existence of this state, I have had frequent occasion to remark, and the opinions of Mr. Abernethy, where, in his valuable work on local diseases, he alludes to various anomalous affections produced and kept up by this cause, show how frequent it is. The following case illustrates this fact in a very striking manner:—

"A gentleman, of a delicate constitution, and who had impaired his health by irregular living, was affected with periodical attacks of pain in the head and face. He applied to a physician in the city, who prescribed something that gave him considerable relief. Soon after, he was attacked with pains in the abdomen, and diarrhœa, which continued to return, at intervals, for some months.—At this time, an ulcer formed near the ankle from a slight scratch he had given himself, when asleep. In proportion as the ulcer enlarged, the preceding affections ceased; and, by adhering strictly to a prescribed diet, and varying the dressings, it at length healed. Pustules soon after appeared on different parts of the body, and these in turn gave place to a discharge of blood from the anus, with the usual symptoms of weight, tension, &c. Since then, he has been subject to hæmorrhoidal tumours, which appear to supersede the formation of other diseases, as, in other respects, he has continued to enjoy a tolerable state of health.

"The recurrence of diseased action, in cases similar to the preceding, would be attributed, by Mr. Abernethy, purely to a disordered state of the digestive organs; but, although this opinion may often be correct, it is more consistent with experience, and the known laws of the animal economy, to refer it to a general or constitutional affection. Independent, however, of the influence which a disordered state of the digestive functions may have upon the general health, and, through that medium, on the formation of hæmorrhoids, there are other circumstances connected with it, that tend, in a very particular manner, to the same effect. The constant passage of undigested and irritating aliment over the mucous surface of the large intestines, the frequent accumulations, and consequent purging that is produced, either naturally, or by the exhibition of medicines, act most powerfully where a predisposition already exists to the formation of hæmorrhoids." 57.

Constipation. Of the occasional or exciting causes of hæmorrhoids, M. Montegre properly considers constipation as in the first rank. It is not merely by the distention of the lower bowels, from the accumulation of hardened fæces, that irritation is produced there, and an afflux of blood determined to the part. The chemical qualities of these accumulations, Dr. M. thinks, tend also to increase the irritation, while their pressure on the meseraic veins produces congestion in the vessels of the rectum. Lastly, the efforts at expulsion gorge the vessels, and strain and protrude the parts in a manner eminently calculated to bring on the hæmorrhoidal paroxysm, where a disposition has previously existed.—If constipation induces piles, it may be readily conceived how much it aggravates them when already formed. The parts are often lacerated by the straining, and then the serious and sometimes dreadful consequences of fissures, ulcerations, &c. ensue.

Les Travaux du Cabinet. By the phrase "*desk occupations,*" we can best render this into English. Montegre does not consider the *intellectual labours* of the cabinet as exciting causes of hæmorrhoids. They predispose, however, to this affection, by introducing into the system a morbid sensibility and nervous irritability which strongly conduce towards fluxionary movements or determinations of blood of every kind. Desk occupations operate in another manner. The sedentary habits, and sitting posture almost inseparable from them, produce constipation, and this soon excites piles, in the way before described.

The Depressing Passions. It is a curious fact, that these will directly produce a fit of hæmorrhoids in those predisposed to them. On this, as on many other points of pathology and physiology, we are better acquainted with the *quo* than with the *quomodo*—in other words, we know the *facts*, but cannot *explain* them. Let us hear how Montegre explains the one just alluded to.

"The turbulent and depressing passions (la colère, la crainte, la tristesse habituelle) exercise a remarkable influence on the cœliac plexus, which governs the actions of the liver, gall-ducts and the whole of the vascular system therewith connected—including necessarily that of the lower bowels. The impression of these passsions is felt at the epigastrium, by an uneasy weight and sense of constriction. This impression deranges the digestion, and often produces spasmodic vomitings, diarrhœa, and sometimes jaundice. The general effect of these profound emotions is to concentrate the circulation in the interior, and leave the

cutaneous surface almost bloodless. In those who are disposed to apoplexy, this state often brings on such an event—and so it is with hæmorrhoids, in those predisposed to the complaint." 499.

The above explanation is, after all, little more than a faithful enumeration of phenomena. It is, however, the only explanation which can be offered in the present state of our knowledge.

Abuse of Purgative Medicines. Drastic purgatives, especially of aloes, colocynth, black helebore, &c. are well known provokers of piles. Montegre avers, that he has seen many instances of piles produced or aggravated by the habitual use of lavements of warm water, or endued with purgative qualities.

It was long an opinion among ancients and moderns that riding on horseback was prejudicial to hæmorrhoidarians. The fact is just the reverse. There is not a more certain preservative from piles than regular horse exercise. But if a person unaccustomed to equitation, takes this exercise in a sudden and violent manner—especially if he have the piles in the least protruded at the time—then, he may suffer from what, at another time, and more judiciously managed, would prove an excellent preventive. This fact is substantiated by our cavalry surgeons—and we need only refer to the testimony of Baron Larrey on this subject, for ample proof of the position now laid down.

The repeated application of leeches to the anus Montegre has seen bring on hæmorrhoids. This may be true, and yet leeches may be proper when inflammation supervenes on the common hæmorrhoidal movement.

It is no uncommon thing for those who are afflicted with painful, or permanently protruded piles, to furnish themselves with a chair or cushion, pierced with a hole in the middle, in order to prevent any pressure on the parts about the anus.—This, though productive of present ease, is, according to Montegre, an injurious practice, as it favours the production and continuation of the hæmorrhoidal tumours. It stands to reason, indeed, that parts which have a tendency to protrusion should be supported rather than have all artificial support withdrawn. Indeed, it is often essentially beneficial, in these cases, to keep a pad on the anus, by means of a T bandage, and that braced pretty tightly, to prevent the descent of the hæmorrhoidal tumours.

Diagnosis. There is little difficulty in distinguishing piles from other affections that may bear some resemblance to them —but there is some difficulty in ascertaining whether they are of constitutional origin, or are only produced by temporary or accidental causes. The distinction must be drawn from an investigation of the symptoms, the mode of life, the age of the patient—and particularly from the causes that produce them.

Suppression of the Hæmorrhoidal Discharge. Cullen gave a very unguarded opinion respecting hæmorrhoids. He considered the disease as rarely of a constitutional, and generally of a local nature. He was consequently of opinion that the disease was, in all cases, to be removed as speedily as possible, and seemed to apprehend no danger from a suppression of the discharge. Now this may be all very well in sound constitutions; but where there is any defect in the system, or weak organ in the body, we should be careful how we suddenly stop the hæmorrhoidal movement and discharge.—Montegre quotes, from various authorities, a great number of disorders brought on by the suppression of hæmorrhoids, as fevers, inflammations of internal organs, hæmorrhages, the neuroses, and organic diseases. Mr. Calvert gives an instance, in his own practice, of gastric fever, caused by the application of cold water to the anus during an attack of piles. Mr. Howship states, that a gentleman, who had a periodical discharge of blood from some hæmorrhoidal swellings, was induced by the advice of a quack, and contrary to the opinion of his surgeon, to apply a strong vitriolic wash. This cured the discharge, but the gentleman died in three days afterwards of gout in the stomach. Apoplexy has also been known to succeed similar acts of imprudence.—The father of physic, Hippocrates himself, observed that the hæmorrhoids preserved the constitution from a great number of diseases. The oftener the hæmorrhoidal attack is renewed (as Mr. Calvert properly observes) the more liable it will be to recur, "and the greater will be the risk of endeavouring to effect a sudden cure." On this account it is highly desirable to ascertain the cause or causes of the complaint, and remove them. We now come to an important division of our subject—the Therapeutical.

Treatment. Montegre well observes that the treatment of the hæmorrhoidal movement in the system is a different thing from that of its local *effects* or *consequences*—as the discharge, the tumours, &c. We shall first speak of these accidents or consequences. And we agree with Montegre that, when a

medical man is consulted respecting piles, he should invariably examine the parts carefully, since nothing is so fallacious as the descriptions given by the patients themselves, of which we have seen many instances.

A *Treatment of the Sanguineous Discharge.* While the discharge from the hæmorrhoidal tumours is moderate—returns at intervals of some distance—and leaves no unpleasant effects, it should not be considered as a *disease*, but only a salutary adjustment of the constitution, attended, it is true, with inconvenience, but with more than counterbalancing advantages. From the moment, however, that the discharge becomes excessive, no time should be lost in restraining it. To judge of the excess, we must look to the *effects* rather than the *quantity* of the discharge. Some people will lose great quantities of blood daily in this way, and yet be in perfect health; but whenever the discharge is followed by pallor, debility, or spasms, it is then in excess, and should be restrained.

Like most other hæmorrhages it may appear in the *active* or in the *passive* form. In the active form, we should endeavour to divert the determination of blood from the hæmorrhoidal vessels, as well as lessen the local hæmorrhage. The body should be laid horizontal, and kept cool and quiet.—These means alone will often succeed, without other remedies. If not, blood should be drawn from the arm—cooling drink should be ordered. If these means do not succeed—and if the patient become weak and nervous, the discharge still continuing, cupping-glasses, with or without scarificators, may be applied to the loins or hypochondriac regions. The ancients were in the habit of applying ligatures on the extremities, in cases of profuse hæmorrhage, with the view of retarding the blood in the veins. The moderns neglect this measure, though it is reasonable to suppose that it might be serviceable in conjunction with others.

Revulsives, as sinapisms, blisters, and other applications to the surface are proper, in order to draw the blood to the surface. These means failing, we must have recourse to local applications, as cold and astringent lotions, injections, &c. or the rectum may be plugged.*

* The ancients, and even some of the practitioners of the last century, applied the actual cautery, in these cases. Sultches states that he saved the life of a patient by this means. The operation requires address—and is not practicable, unless the spot whence the blood issues can be brought into view.

In the passive forms of hæmorrhoidal hæmorrhage, we must exhibit the mineral acids with bark, steel, or other tonics. The superacetate of lead and opium, however, will be found the most powerful remedy in this as in most other hæmorrhages.

The Hæmorrhoidal Tumours. Of all the remedies for protruding piles, pressure is, unquestionably the best. In fact, no man need be troubled with external piles who, after each alvine evacuation, washes the anus with cold water, and applies pressure to the piles, by means of a T bandage —that is, one handkerchief tied round the loins, and another crossing between the thighs, and drawn tight, with a piece of soft sponge or a pad of linen pressed on the anus. We have known men, who were unable to crawl about their rooms, in consequence of painful protruding piles, quickly rendered capable of walking out without inconvenience; and the more they walked or rode, the better for the piles. When the hæmorrhoidal tumours, however, are internal and only protrude on going to stool, the case is altered—and if the constitutional means which shall be hereafter pointed out, do not succeed in correcting the hæmorrhoidal tendency and diminishing the tumours, we think there should be no time lost in removing them by an operation, in order to prevent many painful or even dangerous consequences, which too often ensue, when they are suffered to remain and keep up constant irritation in the rectum.

The ligature and the knife are the two means now used almost exclusively for the removal of hæmorrhoidal tumours. Great differences of opinion have prevailed, and still prevail respecting the more eligible of these two plans. Mr. Calvert quotes the following passage from one of our latest writers, and one of our most active practitioners in this disease, of the present day—Mr. Copeland.

"'But I am very sorry to say, (observes Mr. Copeland) that although I have repeatedly succeeded to the utmost of my wishes, in curing the disease, by the application of a ligature, this success has not been so uniform as to establish it in my mind, as an operation always to be recommended. In one instance the patient very narrowly escaped death; in another, very serious symptoms were produced, and in a third the operation nearly proved fatal. I have also heard of one or two instances where the life of the patient was destroyed by freely tying off the hæmorrhoidal excrescence.'"

Now we know that Mr. Copeland's practice is, and long has been, almost invariably the *ligature*. Mr. Copeland's success, too, by the ligature, is entirely owing to his following the precept of Galen, laid down so many hundred years

ago—namely to draw the thread as tight as possible, so as to completely destroy the vitality of the tumour. We think that it must have been inattention to this important point that has created so much prejudice against the ligature. Le Dran observes that besides the extreme and almost insupportable pain caused by the ligature, it is possible that the inflammation extending along the rectum may reach the other intestines, and give rise to those effects which take place in hernia from strangulation of the bowel. "It is therefore better to cut them off in succession." Mr. Abernethy also prefers the knife.

"Yet it has appeared to me, that tying hæmorrhoidal excrescences is productive of all that temporary distress which is observable in what I have termed their natural cure; and as there is a general disorder in the functions of the alimentary canal in all such cases, the irritation occasioned by the ligature aggravates this habitual disorder, and produces sometimes very alarming symptoms."* 98.

Montegre condemns the ligature for the following reasons —"1mo Because the operation is often very difficult, and always very painful—2ndo Because the tumours sometimes resist the ligature, and instead of falling off, take on an ulcerative process—3tio Because, as the tumours can only be tied in succession, the irritation produced by the first operation increases the swelling and inflammation of the remaining tumours—4to. The ligature may produce all the effects of strangulation of the gut, as in a case reported by Petite in his Chirurgical Works. For these reasons the ligature should be abandoned. It appears to us that all the above objections of Montegre are founded on the inefficient mode of applying the ligature, and that few or none of them are valid, provided the thread is drawn to a proper degree of tightness at the beginning. Let us hear what Mr. Howship has to say.

"'Many patients are not able to overcome the alarm they feel at the idea of cutting, none of which apply to the mere tying of a tumour. As relates to the surgeon, a stronger reason presents itself in the superior safety of the ligature, compared with the knife. The hæmorrhage, after excision, is sometimes very alarming, and has repeatedly proved fatal. In both modes of operating, the removal of the disease is effected with equal certainty, provided the operation is properly performed. It is supposed, also, that the ligature should be preferred, because it is followed by a greater degree of inflammation, producing an effusion of lymph, which is afterwards only partially absorbed; and that, in consequence, the parts previously relaxed become more firmly consolidated.'" 99.

* "Abernethy's Surgical Works."

Mr. Calvert does not agree with Mr. Howship, in thinking that the ligature is the safer method of the two—or that fatal hæmorrhage has frequently supervened upon the use of the knife. Indeed, Mr. C. appears to think that there are but two or three well authenticated cases of fatal bleeding under such circumstances. We could furnish, from our own memory, more than this number. Mr. Abernethy does not appear to have met with any serious hæmorrhage in his own practice.

"'It is now twenty years since I first began to remove them freely with the knife or scissors, and I have never met with any circumstances to deter me; whilst the relief of suffering, which the operation has afforded to some, and the scarcely to be expected and complete cure which it has effected in many, has been highly gratifying.'"* 106.

Montegre observes, (and Mr. Calvert has copied him†) that the danger of hæmorrhage in excision, arises from opening a varix in mistake for a hæmorrhoidal tumour. "It is of great consequence, says he, not to commit this error, which may be so fatal in its results." Racutus Lusitanus relates the case of a young man who died of hæmorrhage after such an operation; and Denis states that the son of Charles the Fifth died in the same way. Gottlieb gives us the case of a man, 40 years of age, robust and sanguine, and always enjoying good health, who became affected with blind piles that protruded. The surgeon in attendance, one day opened one of the piles with a lancet; and as a very little blood issued, he extirpated it with the knife. The gut immediately retracted, and the pain was excessive, especially when the alvine discharges took place. Blood was at first discharged, and afterwards pus. Tenesmus followed, with daily hæmorrhage, by which he was tormented during four years, without experiencing the least relief from medical or surgical treatment. Disgusted with doctors, he dischaged them all, and trusted entirely to emollient glysters with opium. These produced only temporary relief, and the wretched sufferer dragged on a miserable existence till the age of 52, when he died, dropsical, having used more than two thousand glysters!

The modus operandi, both in excision and with the ligature, we shall give in Mr. Calvert's words, as the directions are very proper.

"The mode of operating for the removal of hæmorrhoidal tumours, must depend, in some degree, upon their position, size, and form. When they are nearly isolated, little or no difficulty can attend their removal: but when they are more extensively

"* Surgical Works, Vol. ii." † See page 102.

connected with the surrounding parts, or form an irregular mass around the margin of the anus, some previous consideration is required to effect their removal with nicety and advantage.

"Having placed the patient upon his knees and elbows, and previously cleared the rectum by injecting into it some warm water, let him strain, so as to force the tumours downwards, whilst an assistant holds aside the nates. When, by these means, the tumours are more exposed, the surgeon is to grasp that which he intends to remove first between his finger and thumb, and draw it gently forwards, or a hook, if requisite, may be employed for that purpose; and having exposed the whole of the tumour, it is then to be separated close to its base, with the probe-pointed bistoury, or the common scalpel. If there are more they may be removed in the same way, but this is not always necessary, as the smaller ones often disappear altogether when the others have been extirpated.

"If the tumours form an irregular and projecting mass around the anus, it is better to include the whole in two ligatures, tied at opposite points. The ends of the two ligatures should then be gently pulled, so as to draw the whole mass a little forwards, and the whole included by the ligatures separated with the bistoury or scalpel. The position of the patient will withdraw the surrounding skin, and in the latter case effectually prevent too much of it from being removed with the tumour.

"Sometimes also it is necessary to employ the scissors, but they should not, I think, be used unless when the tumours are very small, or it is inconvenient to use the knife, because, from the contusion which they undergo in this case, the wound is necessarily more disposed to suppurate. When the same operation is to be performed upon a tumour completely within the rectum, the wooden gorget, or director to guide the incision, and prevent the sides of the gut from being wounded. The improved speculum ani will, in this case, be found useful to ascertain the situation of the tumour, and enable the operator to place the director in the proper position. When this is done, the common bistoury must be introduced along the inside of the fore finger, carried over the neck of the tumour, and the division effected by drawing it forwards firmly along the director.

"In applying the ligature, the patient must be placed in the same position as in the former case, and, if possible, the whole of the tumour that is to be removed exposed in the manner already mentioned. If the tumour is large, or very broad at the base, a double ligature should be passed through it near to its basis by means of a curved needle; but under other circumstances a single ligature will answer every purpose. In either case, however, great care should be taken that the ligature is applied with sufficient force to prevent any partial communication between the parts it is intended to separate; and, as the degree of irritation must be in some degree proportionate to the quantum of substance compressed by the ligature, it is not advisable to operate upon several at the same time.

"Previous to performing either of these operations, it is neces-

sary, on the one hand, that the bowels are sufficiently unloaded, and, on the other hand, that the medicines which have been given for this purpose have ceased to operate. After the operation is completed, an opiate should be given to allay irritation, and to diminish the peristaltic motion until the rectum is in a better state to receive and expel the contents of the bowels. This plan of treatment, however, is less necessary after the application of the ligature than when the knife has been employed, because, in the one case, our object is to produce a speedy cicatrization, whereas, in the other, suppuration is a necessary result; and, besides, the greater probability of danger from inflammation may require that the action of the bowels be not too much suppressed." 110.

A combination of the two methods has been proposed, and executed by some modern surgeons. Sir Everard Home, who had seen many bad effects from the ligature, recommends that the tumour be taken up with a double ligature, and the intermediate portion afterwards divided. In this mode of operating, he states that the subsequent symptoms are much less violent. Mr. Calvert makes a very just observation on this proposal.

"But it is very evident that it is founded upon a wrong principle, for if the ligature be tied sufficiently tight, all communication with the substance of the tumour is necessarily cut off, and no advantage whatever can therefore be gained." 112.

Mr. C. Bell recommends a nearly similar operation, viz. to tie the tumour at its base, and cut off the convexity with the scissors. The following are his directions.

"'The patient resting on his knees, the surgeon holds aside the nates. The surgeon, taking hold of the tumour betwixt his finger and thumb, draws it down, so as to expose the base of it. Now let him pass the hair-lip-pin across the base of the tumour, take off the steel point from the silver pin; over the pin, and consequently fully over the tumour he is now to draw his ligature; he is to draw as much as the patient can bear, without excessive pain: with one motion of the long curved scissors he is to remove the tumour which is thus included in the ligature.

"'The object of the first part of this operation is to restrain the bleeding, and to keep the membranes in contact, that they may adhere, and be consolidated. The advantage of the method is the ease with which it is done, and that the pin may be withdrawn on the first rising of the pain and tension. In the succeeding morning, or in the evening of the same day in which the operation is performed, the pin may be withdrawn if there come pain and tension on the part, for its purpose is answered. But this will not in general be necessary; the pin and the ligature may be permitted to remain until the parts go through the whole process of inflammation. The effect of this operation with the knife or scissors, thus performed, is the adhesion and consolidation of the loose membrane, and the obliteration of the vein which bleeds.'"* 113.

* Galen recommends a nearly similar operation.—*Rec.*

Mr. Calvert objects, of course, to Mr. Bell's proposal, considering the cutting of the tumour as quite unnecessary, provided the ligature be drawn sufficiently tight in the first instance. "If the ligature be properly applied, the vitality of the tumour is as much destroyed as if it were really separated." In conclusion, Mr. Calvert observes, that a contracted state of the rectum is not uncommon, after large tumours have been extirpated from these parts, if the case be left entirely to nature. This affection, however, is readily cured—and still more readily prevented, by the use of a bougie, introduced daily at first, and afterwards gradually left off.* P. 115.

Treatment of Inflamed Piles. Montegre, as we before observed, decidedly objects to the application of leeches to inflamed hæmorrhoids, and thinks that this measure tends to produce determination of the blood to the parts. In this we cannot entirely agree with Montegre, though we know, from personal experience, that there is not so much advantage derived from leeching in this as in some other local inflammations. Our author justly remarks that there is always some degree of strangulation accompanying, or rather producing, the inflammation, and, therefore, attempts should be made to push up the tumours within the sphincter, if they be not too painful for that operation. Emollient cataplasms and fomentations are then proper. Injections, if they can easily be thrown up, are necessary to clear the bowels. When the inflammation is intense, cold lavements cannot be employed; but when the inflammation is somewhat subsided, there is no more powerful or efficacious remedy, in Montegre's experience, than injections of cold water. We shall speak more in detail of this remedy, when we come to the treatment of *painful hæmorrhoids*. That we should be very cautious in using any violence with inflamed piles, may be inferred from the melancholy case related by Zacutus. A man, being greatly annoyed with inward piles, which obstructed the rectum, and prevented his having a motion for several days, was visited by an officious and awkward person, who, in attempting to introduce the pipe of an injection syringe, lacerated one of

* Here Mr. Calvert finishes the treatment of hæmorrhoids; and of him we must now take our leave. The subject, however, requires further prosecution; and we must take Montegre for our text during the remainder of this article. We may observe here, that Mr. Calvert's observations are, in general, very judicious, and that his Essay on Piles is the best in the English language. The other subjects in this volume, we shall notice in a succeeding number of our Journal.

the tumours. The immediate consequence was excessive pain, then gangrene, and, in two days, death!—Gassendi records the death of Pieresi, the illustrious Mecænas of his day, by a similar accident. Montegre properly observes that, in the case of inflamed piles, the patient should be allowed only diluent drinks, and such farinaceous support as produce very little alvine discharges—these last being always very painful, under the best management. A medical friend of ours, who is subject to painful and inflamed piles, confines himself, on these occasions, to water gruel, for some days, taking an opiate every night, to prevent any evacuation from the bowels, till the tumefied and irritable state of the hæmorrhoids subsides. He then takes gentle aperients, or emollient injections. We do not vouch for the general utility of this practice, especially the opiate. Some surgeons are in the habit of making a very free incision, with a lancet, into the inflamed and protruded pile, with the view of discharging a quantity of congested or coagulated blood—and, they say, with considerable success. We cannot speak, from much experience, of this plan, but we have seen it done, without any bad consequences resulting.

Fissures. In the third volume of the Analytical Series of this Journal (Sept. 1822), we gave some account of M. Boyer's paper on spasmodic stricture, and violent pain of the rectum, produced by fissures or crevasses in the gut. Montegre differs, in some measure, from Boyer, and looks upon these fissures as only contributing causes of the excruciating torments which harass some hæmorrhoidarians, and which he considers as essentially of a nervous character. He founds his dissent on the following circumstances, viz. 1st, he has seen these fissures exist, without producing any violent pain; and, 2ndly, he has seen cases of excruciating pain, where no fissures obtained. He therefore considers them as accidental, but aggravating concomitants on painful or nervous affections of the rectum.

In respect to the remedy which Boyer recommends, a complete division of the sphincter ani, M. Montegre avers that "this cruel operation is not always a certain remedy for the complaint. I have seen a patient who was twice operated on, and without any permanent relief." Montegre's remedy for this cruel disease will be seen presently. In the mean time, it is proper to apply surgical means to these fissures. They are sometimes produced, or kept up, by the tumours in their neighbourhood, and the removal of these last will cure the fissures. Sometimes they may be cured by caustic—by the cautery—or by actual excision. We have already mentioned

a case of this kind, where the fissures had become a chronic circular ulcer, with raised and indurated edges.

Treatment of Anal Leucorrhœa, or White Mucous Discharge from the Anus. This is the "hæmorrhoides albæ, mucosæ" of nosologists. It is a frequent accompaniment of piles; but it is not necessarily so, and, consequently, is not to be confounded with hæmorrhoids. If inflammation be present, this must be reduced by the usual means, and the discharge afterwards cured by slightly astringent and detergent injections, with the internal use of balsam of copaiba, oil of turpentine, or cajeput oil.

Treatment of Nervous Hæmorrhoidal Pains. Our readers will remember the description which has been given a few pages back, of this terrible disease. They will remember that the pain is of an intermitting character; that is, it is renewed each time the patient goes to stool, and generally ceases when sleep takes place. Montegre was led to the discovery of the efficacy of cold injections in this disease, by observing that when patients affected with the complaint, happened to discharge their fæces while bathing in a river, or the sea, they sometimes escaped the torment which ensued when they used a common commode. But, unfortunately, this does not always, nor even generally succeed, and it is often an impracticable measure. After giving a list of the various remedies which have been recommended for this formidable malady, including hyoscyamus, belladonna, solanum nigrum, stramonium, opium, the preparations of lead, spirit of wine, vinegar, balsam of sulphur, &c. all of which have been highly praised, though few of them deservedly so, our author comes to COLD WATER, which, in his experience, is far superior to them all. It is to be used either as a lotion, a "*douche ascendante*," or an injection. Montegre observes, that he could relate a great number of instances, where the success of this remedy was indisputable, but contents himself with the two following.

Case 1. "A man, 34 years of age, of good constitution, but hæmorrhoidinary from an early period, had, during the last few years, experienced long and painful attacks of the complaint under consideration. The last attack had now continued three months, without any relief from pain, though a great number of remedies had been used in vain. Each evacuation was followed by the excruciating pains already described, so that the poor man was often deprived of sleep for whole nights together, was reduced to despair, and almost entirely abandoned food, for fear of the sufferings attendant on the evacuation of the fæces. In this state,

he commenced the use of the "douche ascendante," by means of a syringe with a crooked pipe.* The first effect of this application was a diminution of the pains, and the reduction of the hæmorrhoidal tumours, so as to be reducible within the sphincter. The process was continued for three or four days, and the pains ceased entirely. He has now been five years free from complaint."

Case 2. "The second case was that of a man, 40 years of age, of plethoric constitution, who had been ten years affected with internal piles, without any discharge. A sedentary life, without any regular rest, for some months, had caused an hæmorrhoidal swelling, attended by inflammation, and, finally, by ulceration. To this state was added the excruciating pains in question. Having a water closet, of English construction, he contrived to have the jet of water thrown against the anus, which gave him instant relief, for a time. He renewed the application every time the pain came on, which was sometimes very often in the twenty-four hours, and always with the same effect. By persevering in this plan a month, or six weeks, the ulcerations healed, the hæmorrhoids disappeared, and the pains ceased."

Equitation. Horse-exercise, in moderation, is recommended by Montegre, and justly, as one of the most powerful means of preventing and curing piles—though rough riding is a very common cause of their formation or exasperation. It is a valuable adjuvant to the cold water, in the painful nervous hæmorrhoids, of which we are now treating. It is evident, however, that great care is necessary, when commencing this kind of exercise, lest painful or inflamed tumours should be bruised or burst by the saddle, and thus increase the evil which the measure was designed to remedy. It is proper, at the same time, to state, that Baron Larrey was long in the habit of causing soldiers affected with piles to ride on horseback, at full gallop; and he avers that he never saw any bad effects follow, but generally, on the contrary, the most salutary consequences.

Spasmodic Stricture of the Anus. This severe complaint is very generally complicated with the nervous pain of hæmorrhoids, so often alluded to by Montegre. The spasmodic stricture itself causes pain—or, which is more often the case, the pain causes spasmodic contraction of the sphincter ani, and thus renders the ejection of the fæces both difficult and dolorous. For this complaint, Montegre does not recommend the severe operation proposed and practised by M. Boyer. He avers that, of all the remedies, the "douche ascendante,"

* The *douche ascendante* is merely the throwing of water forcibly *against the anus*, by means of a syringe or other instrument.—*Ed.*

or injections of cold water, are the most efficacious. For this purpose, the lavement should be thrown up when the inclination to stool takes place, which will render the ejection of the motion more easy, and prevent the painful torture which so commonly ensues, if this precaution be not taken. If this measure fail, it is time enough to have recourse to Boyer's operation of dividing the sphincter, as a last resource.

Where the stricture of the anus depends on the presence, and consequent irritation of permanent or organised hæmorrhoidal tumours, it is manifest that nothing but their removal will accomplish a cure.

Treatment of Constipation. This is a fruitful cause and frequent accompaniment of piles. Its removal is therefore an object of primary importance to the patient and practitioner. It is certain that every thing which increases the cutaneous transpiration, and the action of the absorbents scattered over the mucous membrane of the bowels, has a tendency to produce constipation. On this account, the hæmorrhoidarian should be cautioned against all violent exercises that cause much perspiration. The passive exercise of a carriage is well known as predisposing to confinement of the bowels; and even equitation is not quite free from the same objection, but it possesses many counterbalancing good qualities. A warm and soft bed is objectionable. Much depends on diet, in obviating constipation; but it is impossible to lay down any general rules, in this respect, on account of the various and conflicting idiosyncrasies. It is certain, however, that, speaking generally, a rather stimulating food is proper in tendencies to constipation. But every person can judge of the kind of food that suits his constitution. Of laxative medicines, one of the best is sulphur, especially in the form of electuary, with supertartrite of potash and honey or molasses. And when a purgative is required, we have found none answer so well as the common seidlitz powder taken early in the morning, and some warm tea an hour afterwards. It generally produces one loose, watery, and easy motion, with great relief to the hæmorrhoidal patient. But a still better remedy for constipation is obtained by keeping up a regular and due secretion from the liver and other glandular organs in the abdomen. For this purpose the infusion or decoction of taraxacum, with some tartrate of potash, or cream of tartar, is an excellent medicine, when continued a sufficient length of time. Minute doses of the pilula hydrargyri, with a quarter of a grain of ipecacuan, or an eighth of a grain of tartrite of antimony, at bed-time, are generally necessary at the beginning.

Lavements. These are so habitually used by people afflicted with piles, especially on the continent, that it may seem treason to speak against them. It is not, however, against the principle of injections that we speak, but against the *mode* in which they are used. *Warm* lavements must invite blood to the parts, and thus increase rather than diminish the tendency to hæmorrhoids, although they give temporary solace, and prevent much irritation in the passing of the fæces. Injections of *cold* water, on the other hand, possess all the advantages, and none of the bad qualities, of warm and relaxing lavements. They brace the mucous membrane of the gut, and repel the blood from the vessels of the part, thus very effectually checking the hæmorrhoidal enlargements which much sooner or later occur, when the hæmorrhoidal afflux is once fairly established. Montegre's opinion, on this point, is worthy of insertion here. "Les lavemens chauds ou tiédes produisent à la longue l'indolence et la paresse des intestins; quand on a depuis long temps l'habitude d'en user, on ne saurait aller à la garderobe sans en prendre, et souvent leurs secours doit etre repété deux, trois fois et plus, pour produire quelque effet." This is not the case, he remarks, with respect to cold injections. They give such tone to the bowels, that the mucous membrane secretes a sufficient quantity of fluid to facilitate the ejection of the fæcal remains. Our author relates a case in point, where a gentleman experienced an excruciating pain every time he had a motion, in consequence of a fissure in the gut. By the use of cold injections, whenever he felt a desire to have a stool, he completely recovered from this painful state, in the course of four months. Montegre advises that only half a syringeful should be thrown up, as it is not necessary or proper to fill more than the rectum. If the injection passes high up in the bowels, it causes an evacuation of more than was destined to pass at that time, and thus gives rise to irritation about the anus.

Constitutional Treatment. Piles are among those diseases which it is sometimes dangerous to cure. Care should therefore be taken to distinguish those which ought, from those which ought not to be removed.

"Those hæmorrhoids," says Montegre, "which are of a constitutional nature, or which the constitution, as it were, requires, are generally of long standing—sometimes from youth—or they have replaced some grave and habitual affection—are hereditary—attended with well-marked symptoms of plethora—take place from various and opposite exciting causes, or from no apparent cause at all—are preceded by general constitutional symptoms already described—are succeeded by a bettered condition of

health, whether there be a discharge or not—and finally, are accompanied or followed by inconvenience when interrupted or suppressed—all these indicate a constitutional disorder which it is dangerous to meddle too rashly with."

The local or accidental hæmorrhoids are marked by symptoms the reverse of the above, and may be subjected to more active treatment. But it may be well to bear in mind that even these accidental hæmorrhoids, if they take place often, become at length associated with the animal economy, and, in fact, take on a constitutional nature.

Under certain circumstances, Montegre thinks, it may be advisable to provoke or bring on the hæmorrhoidal movement in the system; as, for instance, where there is a threatening of phthisis, of disease of the liver, or mental aberration. In illustration and confirmation of this precept, Montegre relates several cases from his own practice, and from the records of medicine. These, our limits will not permit us to dwell upon in this place. It is proper to bear in mind, however, that this affection should not be provoked upon slight occasions; since, although in its simple form, it can hardly be called a disease, yet it may very frequently become complicated with a train of local evils which are amongst the most painful which flesh is heir to.

Re-establishment of Suppressed Hæmorrhoids. This may often be both proper and necessary, where the interruption or suppression is followed by symptoms which threaten the general health, or the function of some important organ. The means of re-establishing the hæmorrhoidal affection will readily suggest themselves to those who are acquainted with the general causes that commonly produce piles. These are, pediluvia and semicupia—leeches to the anus, with cupping-glasses in the neighbourhood of the rectum—purgatives, especially of aloes, rhubarb, colocynth, sulphate of soda—warm lavements, &c.

Hygiene. We must conclude this article, already rather extended, with a few general observations on the rules which should be given for the conduct of those who are subject to hæmorrhoids. It is not to be expected that any person will conform to all the rules which it may be proper for him to follow; yet still it is desirable that such rules should be known both to the patient and practitioner.

1. A temperate climate is that best adapted to the hæmorrhoidarian. A very hot and a very cold climate tend to produce constipation, and derange the digestive organs. Sudden vicissitudes of the atmosphere are unfavourable to a person

disposed to hæmorrhoids, by deranging the cutaneous transpiration, and thus disturbing the functions of internal organs. Damp and low situations, for the same reason, are objectionable. The use of the tepid bath is salutary, but the hot bath is injurious, in Montegre's opinion. But of all preventive measures, cold water applied to the anus and neighbouring parts, after each motion, or oftener if necessary, is the most effectual security against piles. When hæmorrhoidal tumours protrude at stool, they should never be returned until they are carefully sponged with cold water. This practice should be pursued summer and winter without interruption. The clothing should be the same as for a person subject to rheumatism. It should be warm, to favour the insensible perspiration. Flannel is therefore proper. In respect to food, Montegre condemns the use of spices and stimulating matters, such as mustard, horse-radish, &c. In this point we do not quite agree with our able author; for we believe a moderate proportion of spices with our food is seldom injurious, and often assists the digestion. Spirituous liquors we condemn as much as Montegre. Heldebrandt, who has written well on the subject under discussion, observes that food and drink, taken hot, are injurious; and Montegre joins with him in opinion. We do not attach so much importance to this point as either of our authors. The grand object is to keep the digestive organs in a good state by the quantity and plainness of our food, by our temperance in drink, and by the regularity of our hours of waking, repose, and exercise. When medicine is necessary in addition to regimen, it should be such as corrects bad, and increases scanty, secretions from the liver and other glandular organs of the abdomen, as well as from the cutaneous surface. The means of effecting this are well understood in this country.

We have now brought this article to a close—already too protracted, no doubt, in the opinion of the learned and experienced. But let it be remembered that we do not write entirely, nor even principally, for *these*. "Doctis indoctisque scribimus." It is the great object of this Journal to make that which is *true*, rather than that which is *new*, more generally known through all ranks of the profession than formerly. In this respect we are among the Levellers—not those who would level the profession to the ranks of the vulgar, or raise the vulgar to a level with the profession—but who would wish to see medical science itself more generally and more evenly distributed among the different denominations of its professors. If the MEDICO-CHIRURGICAL REVIEW should prove contributory to this great and desirable end, its conductors will not have lived in vain.

II.

OPHTHALMIA.

1. *Observations on the History and Treatment of the Ophthalmia accompanying the secondary forms of Lues Venerea. Illustrated by Cases.* By Thomas Hewson, A.B. Member of the Royal College of Surgeons in Ireland; Professor of Materia Medica, &c. and Surgeon to the Meath Hospital and County of Dublin Infirmary, &c. &c. &c. Octavo, pp. 117. With a coloured plate, containing six figures. London, 1824.

2. *Practical Remarks. Part* I. *On Acute and Chronic Ophthalmia. Part* II. *On Remittent Fever, viz. Simple and Complicated.* By Thomas O'Halloran, M.D. Author of Treatises on the Barcelona and Andalusian Yellow Fever Epidemics. Octavo, pp. 148. London, 1824.

It is very probable, as Mr. Hewson observes, that venereal ophthalmia is coeval with the other secondary symptoms of syphilis, among which it holds a distinguished place. It is, therefore, remarkable that more has not been written on the subject, considering the importance of the organ affected.—None of the earlier, and but few of the later authors, according to Mr. Hewson, "have manifested the most distant notion of the true seat or symptoms of this affection"—even Hunter himself entertained doubts of its existence. The descriptions, says Mr. Hewson, of Howard and Ben. Bell, are "devoid of every degree of accuracy and truth." Mr. Pearson also, in a letter to Mr. Briggs, the translator of Scarpa, observes that "there are no specific characters by which diseases of the eyes or eyelids, produced by the action of the venereal virus, can be distinguished from those excited by other causes."—The merit of being the first author who made this ophthalmia an object of particular attention, is due to the late Mr. Saunders, who took a correct view of its distinguishing symptoms. His untimely death left this and most of his investigations unfinished. Although this ophthalmia has attracted pretty general attention since Mr. Saunders' time, Mr. Hewson avers, that "it is not yet distinguished with sufficient accuracy from the common kinds of ophthalmia—nor is the proper treatment observed in these respective states of disease." Mistakes of this kind, he remarks, bring injury to the patient and discredit on the practitioner. On this account he thinks that a short and distinct practical view of the syphilitic ophthalmia, di-

vested of those speculative doctrines in which the whole subject of lues venerea has lately been involved, may be useful to the junior members of the profession, "for whose instruction it was chiefly undertaken."

When syphilis attacks the internal structures of the eye, a peculiar ophthalmia is the consequence, which has lately been termed venereal iritis—a term which our author thinks objectionable, as limiting the disease to the iris. He, therefore, prefers the older denomination *syphilitic ophthalmia*.—He divides the progress of its symptoms into two stages. In the *first*, they are all of a temporary nature, and effectually curable; in the *second*, they are, in a great degree, beyond the reach of relief, and more or less permanently injure the eye in structure and function. This disease attacks one eye first, and after having gone through its various stages, seizes on the other. It is very seldom found to exist in both eyes at the same time, unless neglected or unskilfully treated. But the eyes are sometimes alternately affected, the disease subsiding in one, and becoming aggravated in the other.

1. *First stage*. As our diagnosis depends on accuracy and fidelity of description, it will be necessary to be somewhat minute in this part of the subject. We shall open the description in Mr. Hewson's own words.

"It usually begins with some uneasy sensations about the ball of the eye; sometimes these are so slight as not to be complained of: there is generally a flow of tears; the admission of light gives pain; and objects appear as if seen through a mist. Commonly, however, these symptoms at first engage so little of the attention of the patient, that he neglects applying for advice until urged to it by the increasing dimness in his sight. It is, therefore, unusual to meet a case in which the disease has not been of some duration, and made more or less progress.

"The following appearances and symptoms, as they affect the different parts composing the ball of the eye, will, in a majority of cases, be observed.

"The patient keeps his eye half-closed, and avoids, as much as possible, exposure to the light, which always excites pain and flow of tears: from the same cause the eye rolls, and is so unsteady, whilst an examination is making of it, that it is often difficult to get a satisfactory view of it.

"There appears always more or less external inflammation; and if we attentively examine the enlarged vessels, we shall, in general, be able to distinguish two tissues of them; one superficial, which belongs to the conjunctiva; and the other more deep-seated, connected with the substance of the sclerotic: in colour, they are sometimes of a florid, but oftener of a purple or venous hue. That part of the conjunctiva which lines the eyelids is not

usually under much irritation; the portion which covers the eye-ball is a little more inflamed; sometimes it is here a little œdematous, or a small vesicle or two may be observed on it; but it never enters into the thickened, fungous structure, nor is there any secretion of purulent mucus from its surface; both of which are so often the effects of the severer forms of external ophthalmia.

"A great part, however, of the redness of the eye-ball is produced by vessels passing through the sclerotic, which becoming more numerous and frequent in their inosculations as they advance forward, and terminating abruptly, nearly at the space of a line from the cornea, about the situation of the ciliary ligament, cause in this part the peculiar appearance of almost a distinct red circle. Neither at this, or the more advanced periods of the disease, do these enlarged vessels pass over the surface of the cornea; nor have I ever observed any speck or ulcer forming on it: in a few instances there has been an appearance like the arcus senilis.

"There is generally a pretty abundant flow of tears, the ordinary motions of the eye and eye-lids; the effort to look attentively at any object, or any pressure on the eye-ball, create pain.—These symptoms may surprise an inexperienced observer, as not being sufficient to account for the great defect of vision of which the patient complains; but the principal causes of this will be found to exist in the state of the aqueous humour and pupil, to which the attention must be particularly directed. This humour is always more or less clouded by an opaque fluid, which is generally seen floating in the anterior chamber. This prevents a clear view of the iris and pupil, and causes an appearance as if there was an opacity in the cornea. As to its nature, this opaque fluid would appear to be lymph, secreted by the vessels of the inflamed iris. It varies in quantity; it is sometimes so abundant as to render the greater part of the iris invisible; and, intercepting all passage of the rays of light, for a time entirely deprives the patient of vision. In some cases it scarcely disturbs the transparency of the aqueous humour; in others we see it condensed and collected into a mass, and attached to some part of the iris, generally near the pupil. Whilst in this state, in the more advanced stages of the disease, vessels shoot into it, and it becomes organized. It would seem to be specifically heavier than the aqueous humour, for it changes situation according to the position of the head. Thus, after the patient has lain some time in bed, it may be seen on either side of the anterior chamber; but when he is for any time in the erect posture, it accumulates chiefly about the lower part of the chamber and inferior margin of the pupil; also, as more or less of it always lies within the space of the pupil, it produces here an appearance like commencing cataract." 7.

In a few instances our author has seen blood instead of lymph effused into the anterior chamber, but not attended with any bad effects.

The appearances about the pupil vary in different cases—

being in no two instances exactly similar. In general it is within the middle state of expansion, and remains nearly immoveable in every variation of light. As the disease advances, the pupil contracts, and soon begins to lose its circular form. Some part of it, however, usually preserves its natural form, contracting a little under light, and dilating under belladonna. In many cases, one or more small tubercles present themselves about the pupil, at this period—often appearing on some part of the surface of the iris which undergoes some remarkable changes as to colour, often assuming a yellowish or amber tinge—sometimes with a reddish circle about the ciliary ligament. As the disease advances, vision grows more imperfect, and rather severe darting pains are often felt at the bottom, and round the external parts of the orbit. In many instances, however, no other unpleasant sensation is perceived beyond that of intolerance of light.

In this state, or nearly so, the symptoms may remain from six to eighteen days—being seldom protracted beyond the twentieth, without symptoms of the second stages presenting themselves. It is to be borne in mind that, at this period, while the pupil is contracted, and its motions impeded, adhesions may form between it and the capsule of the lens, without being immediately perceptible. If this has occurred, the disease has already entered into the second stage, which is now to be described.

"2. *Second Stage.*—In addition to the preceding symptoms, we will have to notice, in the second stage, an increased contraction of the pupil, and that it becomes more irregular, puckered, and inverted; and often a black fringe appears round its border as if from a detachment of portions of the nigrum pigmentum. We will, also, generally see one or more angular points proceeding from it towards the capsule of the lens, and these mark where adhesions have formed between it and the capsule. For a greater or less extent round these attachments, the latter membrane gradually grows opaque. The whole surface of the iris is often observed to become conical, and to diminish considerably the limits of the anterior chamber. About this time, also, in a few instances, enlarged vessels may be distinguised, ramifying superficially over it.

"Likewise, we will have, in many cases, to attend to a very singular, and, I might add, characteristic symptom, to which I have already alluded, namely, the formation of one or more small tubercles on some part of the iris. When these occur, there is always more pain and tenderness felt in the eye-ball than usual: they commonly present themselves at or near the surface of the iris, between the pupil and its ciliary attachment; they are found from the size of a large pin's head to that of a small split pea; sometimes there appears but a solitary one, at others, we see two or more of them unconnected; but, in some cases, a number are

clustered together, and project into the pupillary space, so as nearly to fill it up, or protrude forward into the anterior chamber: at one time they hang pendulous, at another, they are attached by a broad base; when small, they are of a dark red colour; but when large and prominent, they are more or less white at the apex, while, about the base, the redness continues. By closely examining them in this latter state, we shall distinctly observe that the inflamed superficial membrane of the iris is reflected over them, and forms their anterior covering; and thus, when these tubercles are small, their covering retains the redness caused by its state of inflammation; but when they are larger and more pointed, it becomes transparent about the apex, where, as happens in a common pustule, their whitish contents are visible." 14.

After the disappearance of these tubercles, we may often discover a fissure, or cicatrix in that part of the iris where they have been situated. Our author considers them of a pustular or purulent nature, and has never found them attendant on any other kind of inflammation or morbid action. He, therefore, looks upon them as characteristic of venereal ophthalmia.

"During the active stages of the disease, the pupil still shows a tendency to contract, until, at length, it scarcely exceeds, in diameter, a large pin's head. The opacity likewise spreads, and becomes more dense in the capsule of the lens; and, finally, nearly all power of vision is suspended." 16.

In this state of things, there is every probability that the deeper seated coats, the choroid and retina, are more or less involved in the disease. In the syphilitic ophthalmia, indeed, defective vision and intolerance of light are amongst the earliest symptoms complained of, occurring before any decided signs of disease appear about the iris and pupil, and continuing unabated, or rather increasing, while any degree of the morbid action is going on.

About this period—sometimes earlier, if no efforts are made for the relief of the complaint, the other eye may be attacked, and the symptoms suspended in the first—and thus alternating till the disease has produced its full effects in both. In some time after the symptoms have completed their course, they generally begin gradually to assume a more indolent and chronic form, and the pain and irritation finally to subside.

After the disease has been some time established, and where an irregular and inefficient treatment has been pursued, an abscess sometimes forms in the deep seated parts, and generally terminates in the destruction of the organ. The first indication of this, is usually an œdematous swelling on the fore part, and on one side of the eye-ball, immediately behind the ciliary attachment of the iris. The abscess makes its way, both ex-

ternally and into the anterior chamber, where it discharges itself in flakes that do not mix with the aqueous humour, as happens in common hypopion. Both iris and cornea are quickly destroyed by sloughing and ulceration, the aqueous humour, lens, and part of the vitreous humour, are evacuated—the sclerotic contracts about the vacant space, and the anterior chamber is finally obliterated.

Constitutional Symptoms. It is only when syphilis has attained its secondary stages, and more or less contaminated the system, that the eye becomes susceptible of the venereal ophthalmia.

A half-cured chancre, or bubo, may be present with it, but some constitutional taint is necessary to its production. Some facts have led our author to believe that the violence of the ophthalmia is in proportion to the disturbance and strength of the constitutional symptoms, and *vice versa*. He has also observed that, in those cases where no mercury has been used in the primary stage, or previous to the occurrence of the ophthalmia; the latter has appeared in its most severe and exasperated forms, and *vice versa*. Thus, nurses who receive the infection from pocky children, and women who receive it from their husbands, often allow the disease to run on to its second stage unsuspected, and in them the venereal ophthalmia, when it does occur, is generally of a bad kind. On the other hand, the patients with whom the ophthalmic symptoms have manifested most mildness and indolence (who are by far the majority) have been those whose previous treatment had been conducted on what is called the alterative plan—by pills, and without confinement."

Some species of eruption most commonly attends the syphilitic ophthalmia, and is generally of the papular or scaly kind. It is not, however, necessarily connected with eruptive symptoms—it may be associated with any general symptom—or it may exist alone. When the characters of the constitutional symptoms are unequivocal, their concurrence will be decisive of the nature of the ophthalmia—but when they are faint or obscure, other circumstances are to be looked into, as the state of health—some previous syphilitic affection, &c.

"If, in conjunction with some suspicious appearance about the skin, we observe him pale and emaciated, that his health and strength have been for some time on the decline, that he is less equal to his usual bodily exertions, that he complains of pains about his limbs and joints, particularly at night, together with nocturnal perspirations; that at some recent period, generally within the twelvemonth, he contracted venereal symptoms, in the treat-

ment of which there appears something faulty or objectionable; we have strong grounds for concluding the case to be syphilitic.

"If the skin is free from any symptom to which we can attach suspicion, we are next to examine into the state of the throat, which is very frequently affected at the same time with the eye. We shall here often find one or more ulcers, or a greater or less degree of excoriation, or irritation, either actually present with, or immediately preceding, the ophthalmia; and, in some instances, the transition of the disease from the throat to the eye has been remarkably rapid, a day or two only intervening between its disappearance from one and its seizing on the other. As the symptoms about the throat are often of an extremely dubious character, we can seldom solely rest our judgment on them; but must, as has been observed above, take our view of the case from an inquiry into the other circumstances attending it." 28.

Besides the above, there may be discovered, on different parts of the body, morbid cicatrices, blotches, or ulcers—there may be articular or periosteal pains or swellings, &c. But, in not a few instances, the ophthalmia may be solitary. In women, we shall often find that, in addition to the ophthalmia, the only circumstance leading to a suspicion of constitutional taint, is their having had repeated abortions, or still-born children.

Exciting Causes. These are such as are found to be influential in exciting the venereal morbid actions in other parts of the body—particularly exposure to wet and cold. Our author does not concur in the opinion of Mr. Travers, that the constitutional use of mercury predisposes to the disease. "I have (says Mr. Hewson) cæteris paribus, as frequently met the ophthalmia where no mercury had been previously used, as any other secondary symptom of lues venerea; and, indeed, some facts have induced me to believe, that the constitutional operation of mercury rather diminishes than increases the susceptibility to the former."

Diagnosis. It is only the milder and more chronic forms of internal *idiopathic* inflammation that have any similarity to those of a *syphilitic* origin. But notwithstanding their agreement in some respects, idiopathic will be found to differ in its effects from the syphilitic ophthalmia, in many remarkable circumstances.

"1st. It does not so very quickly disorganise the structure, or disturb the functions of parts it attacks; and it is often for months' duration, sometimes subsiding, or almost entirely disappearing; and again, after certain intervals, returning, without leaving any permanent injury.

"2d. We shall rarely observe (indeed I have never met such a case) that it produces the same kind of pustular tubercles on the iris, and about the pupil, which have been mentioned as frequently appearing in the venereal ophthalmia.

"3d. After it has subsisted for a long time, it frequently causes organic changes in the iris, choroid, retina, and in the vitreous humour, and terminates in amaurosis, sometimes with an adherent and contracted pupil; in others this is dilated, and in these cases, it is not unusual to observe, in the same individual, one pupil amaurotically expanded, and the other closed.

"Finally, mercury alone is not so active, or so certain in subduing idiopathic inflammation of these parts, as some writers suppose; whilst the means necessary to resort to for this purpose, and which most frequently succeed, are totally useless in the venereal ophthalmia." 35.

But although many other points of difference will readily occur to the experienced practitioner, still no reliance should be placed on lines of distinction drawn from topical appearances alone. In all cases, the state of the patient's general health, both previous and subsequent to the occurrence of ophthalmia, should be closely investigated.

Passing over capsular inflammation, rheumatic and arthritic ophthalmia, we come to—"*ophthalmic symptoms caused by mercury.*" Our author observes that, between this and syphilitic ophthalmia, it is equally necessary and difficult to draw clear lines of distinction. Mr. Travers appears to our author to identify the two sources—averring "that it is impossible to say to which of the two agents the effects belong which manifest themselves at a period subsequent to their successive introduction into the system." To Mr. Hewson this statement does not appear to be borne out by facts.

"It is not because a majority of the cases of iritis met with 'are consequent on the use of mercury,' nor yet because they sometimes occur 'while the system is charged with mercury,' that we are authorized in concluding one to be the specific effect of the other; for we might with equal reason assign mercury as the cause of the greater number of constitutional symptoms generally acknowledged to be syphilitic, the cases in which they appear being commonly found under similar circumstances. A more obvious, and, in my mind, a truer source of the cases in question, may generally be traced to a defective and inadequate mode of administering mercury; in consequence of which, besides other effects, it fails to exert its anti-syphilitic properties, or to eradicate the disease from the constitution; and, during the exhibition in this way, and while the system is yet under its influence, we frequently find syphilitic symptoms appearing in succession, or retiring from one place, and breaking out in another, and often committing some of their severest ravages. This is no uncommon result of what is

termed the alterative plan of treatment, which is confined to the administration of pills, and in which the patient is placed under no salutary restrictions; and ophthalmia, like other syphilitic symptoms, (as will appear from a perusal of many of the cases subsequently detailed,) is no very unfrequent consequence of it. A minute investigation, however, into an extensive variety of cases, which came under my observation while acting for some years as surgeon in the Lock Hospital of this city, (perhaps at the time the largest establishment of the kind in Europe,) not alone impressed me with the opinion that iritis occurring under the circumstances above stated is, with very few exceptions, connected with a syphilitic taint of the constitution, but also that the ophthalmic symptoms usually associated with the 'constitutional use' of mercury are of a very distinct and different nature from the disease in question. Indeed, my experience leads me to look on primary iritis as a very rare effect of the constitutional use of mercury. On the contrary, I have observed the external structures remarkably subject to be morbidly affected by it, and this without its manifesting any tendency of the same kind elsewhere." 48.

In many instances, our author has thought that mercury created a susceptibility to conjunctival inflammation, or aggravated it where present. By this he would not be understood, however, as maintaining that it is often the consequence of a short and temporary use of mercury—but that he has frequently found it resulting from negligent and protracted exhibition of it, "particularly where it was not calculated to act as a remedy."

Mr. Hewson avows that, in those complicated and anomalous cases, which are but imperfectly known to us, under the denomination of *pseudo-syphilis*, where there are "grounds for suspecting that the syphilitic and mercurial poisons are acting on the system at the same time," we shall frequently find it extremely difficult, if not impossible, to form any diagnosis; but, at the same time, diagnosis is here unnecessary—"for we must always treat ophthalmic symptoms occurring under these circumstances, and of this nature, as if they were of a genuine and unmixed syphilitic origin." "For if we here wait the slow effects of any other treatment than that with mercury, these delicate organs will, with certainty, sustain irreparable injury." 55.

Prognosis. On this head little need be said. The symptoms of the first stage are easily and speedily subdued by proper treatment; but many of those attending the second, such as an adherent and contracted pupil, and opaque capsule, remain, to a certain degree, permanent and irremediable.

Treatment. "It is not a little remarkable, that there are no

symptoms of lues venerea, whether primary or secondary, or wherever situated, which yield with more facility or certainty to the constitutional action of mercury, than those which form our present subject—a circumstance peculiarly fortunate, considering the delicate structure of the organ concerned, as well as the rapidity with which many of the most lasting effects of the disease are produced. We have, therefore, little more to do than consider of the most active and efficient mode of bringing the patient under the influence of this medicine." 57.

The oxymurias hydrargyri is a favourite remedy on the Continent, and even with some practitioners in these Islands. But it is objectionable, inasmuch as it must be introduced slowly and in small doses. It moreover acts usually in the alterative way, which is inadequate to a cure in this complaint. The mode of administering mercury now generally adopted in Dublin consists in exhibiting a pill containing two or three grains of calomel, and half, or a quarter of a grain of opium, night and morning, or sometimes oftener—varying these proportions according to their effects or the urgency of the symptoms. The opium is useful in allaying pain or irritation, and in preventing the calomel from running off by the bowels. In proportion as the general system becomes affected with the mercury, we shall observe a gradual amendment in the eye. The pain and irritation first cease—the redness of the eyeball, the intolerantia lucus, the lachrymation subside—the transparency of the aqueous humour is restored—the pupil assumes its natural actions—and all morbid depositions and appearances are removed. Finally, though sometimes slowly, vision returns to its natural state. This, of course presupposes that the treatment has been taken up under favourable circumstances, and during the first stage of the disease, otherwise our success will be more slow and less complete.

"If, after pursuing the preceding treatment for six or eight days, the mercurial influence does not manifest itself, or the symptoms with which the eye is affected do not sensibly yield, frictions may be combined with the pills, until ptyalism is fully established; from the first appearance of which, we shall usually find that the symptoms take a favourable turn. But if, after this sets in, no decided amendment follows, we may reasonably suspect the case not to be of a genuine venereal kind. Though frictions are, with a few exceptions, to be preferred to all other modes of using mercury in the treatment of syphilitic symptoms, in those affecting the eye they are not sufficiently active; nor would it be prudent, in the first instance, to join them with the pills, because these latter will seldom disappoint us; and by attempting to introduce mercury too rapidly into the system, we often defeat our purpose of exciting its proper constitutional action, and render this afterwards more difficult of accomplishment." 60.

In the treatment of this ophthalmia confinement is indispensable. Blood-letting and blistering are considered by our author as perfectly useless, and the same with purgatives.—They ought therefore, in his opinion, to be avoided. Mr. Hewson, however, must know that venesection is a powerful promoter of the constitutional action of mercury, and may therefore be a proper adjuvant on particular occasions. No advantage is to be expected from collyria of any description. Some ease is experienced from fomentations of warm decoction of poppy-heads, in which some of the watery extract of opium may be dissolved. Belladonna is often applied, but Mr. Hewson thinks that it is unnecessary, or even improper, till all active symptoms have subsided.

"When all morbid action has been removed from the eye, and its functions have been restored, as far as its state will admit of, we are not to stop here in the exhibition of mercury, but must persevere in its use as long as we have any suspicion of the existence of a venereal taint: for it should be kept in view, that the quantity required for the relief of the ophthalmia, falls far short of what is necessary for the complete eradication of the disease from the system. In those cases where the syphilitic poison has been allowed to lurk in the constitution, the ophthalmic symptoms, though in a degree subdued, have appeared to proceed on almost imperceptibly, and a gradual and nearly total failure of vision has ensued, which can only be restored by a full and efficient course of mercury." 63.

In conclusion, Mr. Hewson differs from Mr. Travers, who considers "that all forms of iritis, whether primary or secondary, simple or specific, require the constitutional use of mercury for their cure, without exception." Mr. H. thinks that there are many cases of idiopathic iritis where mercury, except as a purgative or corrector of depraved secretions, is unnecessary, as, for instance, where the source of the ophthalmia is disordered condition of the digestive organs—or of the brain. Between these authors we shall not attempt to stand umpire. We have set both their opinions before our readers.

We have now gone through the didactic portion of Mr. Hewson's volume, and given a very copious analysis of its contents. The narrative portion, occupying nearly half of the publication, and containing numerous instructive cases, we recommend to the careful attention of all those interested in the treatment of syphilitic ophthalmia. We have also to return thanks to the author for the instruction which we have derived from a perusal of the results of his practical observations. The plate, containing six coloured figures, is very well calculated to aid the verbal descriptions, and convey clear ideas of the complaint to the reader.

We now come to Dr. O'Halloran's practical remarks on acute and chronic ophthalmia, &c. derived chiefly from military practice, especially in the 64th regiment—a corps in which he has served, in various climates, from the year 1813 till very lately. Our author remarks in his preface, that he pursued the antiphlogistic plan of treatment in ophthalmia, for a period of twelve years, "with a success far short of what he was taught to expect from depletion in diseases of a purely inflammatory character." In fact, in some cases, it was observed that, as soon as the patients recovered from long-continued syncope, "the turgidness of the blood-vessels of the eye returned, and the cases were more troublesome, and the cures more protracted, than where blood had been more moderately abstracted." Experience of twelve years also taught our author "that ophthalmia was aggravated by low diet, total abstinence from wine, depletion, and confinement to bed."—It was observed that those practitioners who bled most copiously were least successful, and, finally, that the exclusion of light and air was highly injurious. Reflecting on these things, our author concluded he was not in the right track, and, at length, struck into that which is here laid before the public.

The unusual prevalence of ophthalmia in the 64th regiment, at Gibraltar, during the last two years, afforded the medical officers but too extensive a field for observation. It is a curious and a melancholy fact, that ophthalmia is more unmanageable in military than in civil life. "The remedies which produce effect with almost positive certainty in one, and that in a short time, are wholly inefficacious in the other—a circumstance that, with the augmented malignancy under which the disease appears among the troops in hot countries and crowded quarters, has excited the astonishment of many whose walk has been confined to the dispersed inhabitants of cold or temperate climates." It is also astonishing, that in a garrison—containing several regiments, one corps will have an ophthalmic list of from 30 to 50, whilst the others are, in a manner, exempt.

1. *Acute Ophthalmia.* Dr. O'Halloran describes three varieties of acute ophthalmia, as it appeared at Gibraltar, in the 64th regiment.

1. The *first* exhibited redness of the conjunctiva and lining membranes of the eye-lids—inconsiderable lachrymation—slight turgescence of vessels—sensation of sand in the eyes—vision little, if at all, affected. Such were the symptoms of the first variety, and it frequently yielded to simple treatment, in a few days.

2. The *second* variety was more complicated. The attack is sudden—there is an increase of lachrymation—a villous flocculence will be found on the lining membrane of the *upper eyelids*, although the ball of the eye be free, with sometimes a thickening, approaching to what is called granulation, about the inner angle of the eyelid. This thickening of the upper, is quickly followed by a villous and prominent state of the under lids. The sensation of sand becomes unpleasant, with a corresponding increase of lachrymal discharge, which, from its corrosive acrimony, produces much pain and irritation.—The meibomean glands now enlarge, and pour out a proportionate discharge—limpid serum flows from all parts of the eye and eye-lids, excoriating the parts over which it passes—the lower eye-lids become tumefied and hard, from the degree of which, a prognosis may be formed respecting the severity of the disease. So great is the increase of secretion in this form of ophthalmia, that all the surrounding structures are, as it were, injected—and the chambers of the eye are so over-replenished with fluid, in many instances, as to cause a defect in vision.

3. The *third* form is the *purulent* ophthalmia. It is perhaps not more formidable, in reality, than the second form, as, in our author's practice, it has yielded as soon, and as certainly to remedy, as the complicated cases of the other variety.

"The eye becomes itchy; and the patient cannot be persuaded but that sand or dirt, as he expresses it, is lodged between the eyelid and ball of the eye. He endeavours to remove the disagreeable sensation by rubbing; which, not producing the expected relief, is immediately succeeded by obtuse pain, augmentation of the sensation of heaviness, and by a flow of fluid resembling tears, which, from being thin and watery at first, is converted into a puriform matter, wholly divested of the acrimony attending the serous discharge in the second form. If the eye-lids be now examined, a thickening of the lining membrane of the upper is observable, and the lower are villous. As the puriform discharge augments, it becomes dense and tenacious: the capillary vessels on the ball of the eye and neighbouring parts, are in a state of irritation. This is considerably augmented by rubbing the ball, and the propensity to rub is irresistible. The vessels which nourish the conjunctiva and lining membranes pour forth a matter of a puriform nature, whilst those of the eye-lids internally, and also of the internal parts of the eye, secrete and discharge a quantity of whey-coloured serum, producing a tumefied state of the eyelids, and of the ball of the eye, which characterize the disease, and occasion the partial or total loss of vision. (The loss of vision is attributable to the existence of a turbid fluid in the aqueous and vitreous humours, the obtuse pain to the distention of the ball of the eye from extravasated fluid, and not to inflammation.) As the turgescence and prominence of the eyelids, which assume a bluish

hue, increase, the vessels which nourish the conjunctiva and sclerotica augment in size; the texture of the former, being reticular and spongy, is injected with red fluid, not blood, or with pure and limpid serum, which as the determination of fluid to the part is considerable, produces extraordinary distention of the conjunctiva. This is sometimes so great as to cause the distended mass to encroach on the cornea; and as the size of the latter appears diminished, to one-half probably, it excites the apprehension of such as are unacquainted with this form of the disease. To this state of the conjunctiva, oculists have given the name of chemosis." 10.

The disease invariably appeared, in the 64th regiment, in one or other of these three forms. The *first*, although simple in the outset, occasionally assumed an alarming character. The *second* variety had different modes of attack—was treacherous in the extreme—and liable to relapses under conditions apparently prosperous. The *third* (purulent variety, generally observed a regular course—the discharge was removed within a short time from the date of admission, by remedial means, and convalescence was generally rapid and certain. Still, our author considers all these varieties as only modifications of one and the same disease—the discharges being merely symptomatic of the different degrees of the malady. The same plan of treatment was extending to all the three forms, "with a success unequalled in southern latitudes."

Methodus Medendi. Our author considers ophthalmia, in every form, to be a local disease, dependent for its production on general causes, which augment the vascular action and secretions of the eye and neighbouring parts, in a similar manner as the secretions of the nasal cavity, &c. are increased during the prevalence of catarrhal affections, to which, he thinks, ophthalmia bears considerable analogy.

"The plan of cure adopted and pursued was as follows:—the patient, on admission, was confined to bed in a large and well ventilated ward, from which light was not excluded. (I conceive that the exclusion of air and light, as is the custom in the treatment of this disease, is often attended with lamentable consequences, always with injury.) He was placed on the spoon scale of diet, purged with calomel and colocynth, and afterwards with salts.—The state of the eye-lids, whether the disease was of the purulent kind or not, was attended to. The upper eye-lids were examined; and whatever the appearance might be, whether villous, thickened, &c. blue stone in substance was rubbed over the surface, for a longer or shorter time, according to the condition of the membrane. If the eye-lids were thickened, as was often the case, or in a state which oculists call 'granulated,' as occurred sometimes, the passing of the blue stone over the surface was continu-

ed for a considerable time: if the appearance was only villous, a superficial and short application was sufficient. The application of blue stone to the surface of the everted eye-lid is attended with acute pain, and on one occasion has produced syncope; but the benefit which resulted, and which results in a short time, is far superior to what has been derived from any remedy hitherto recommended for the cure of this form of disease. Persons who are acquainted with the effects of blue stone on ulcers, &c. will probably revolt at the idea of touching the eye with a substance so irritating; but when they consider that its use has not in any one case been attended with danger, during an extensive application of it in the treatment of this disease; that, on the contrary, it has been uniformly followed by benefit; and that the discharge, whether purulent or otherwise, has been changed in its nature, suspended or suppressed in a few hours; the irritability, pain, and disagreeable sensations mitigated or removed, soon after application, they cannot well refuse to give it a trial. The author confidently affirms it to have, in his hands, proved a remedy greatly superior to any other hitherto employed. In this case he speaks with confidence, as justified in his opinion by experience, on an extensive scale, in the acute as well as the chronic stages of the malady. It is comparatively safe and little troublesome, and it is seldom followed by ulcers or other bad consequences. Let the application of blue stone to the upper eye-lids, and not unfrequently to the lower, be followed by fomentations, repeated four or five times in the twenty-four hours. If vision had been impaired, an alteration for the better in that respect will generally be observed on the second day, the discharge, if great and attended with nictitation, will be changed in quality and much diminished in quantity: the heaviness and pain will be lessened, if not entirely removed, in so much, that the patient proclaims himself in a state of comparative happiness. A change for the better having been thus effected in a few hours, and danger in such instances obviated, it will be well, if the application of the remedy had been only superficial and transient on the first day, to repeat it on the second; but if it had been severe, and if the slough adheres to the lining membrane, as often happens where there is great debility of the parts from over distention of the vessels, it will be well to instil a solution of lunar caustic into the eye in the morning, in the proportion of ten grains to an ounce of water, and to repeat the fomentations as on the preceding day. A solution of lunar caustic, of the above strength, is an excellent remedy in this disease. It may be used at all periods, and, next to the blue stone, claims a preference to all others. Its action, when resorted to at an early period, tends to change and lessen the discharge, and to remove the pain and irritability, without causing any of those unpleasant symptoms which some have attributed to its use. It is certainly a remedy of great value, and may, in slight cases, or where the patient is averse from the application of blue stone, be depended upon as efficient means of cure. As an auxiliary in a severe or protracted disease, it ought never to be omitted. I have made trial of lunar caustic solution in different degrees of strength, viz. from one grain to half a

drachm, dissolved in an ounce of water; and, after witnessing the effects of all, I gave the decided preference to the ten grain mixture. On the second day I usually give a purge of the magnes. sulph. and occasionally repeat the lunar caustic drops in the evening, or touch the lower eye-lids slightly with blue stone; after which fomentations are again employed. On the third day the blue stone, or caustic drops, are repeated and fomentations applied to the eyes. Under this plan of treatment, varied according to circumstances, more than eighty of one hundred will recover, without the use of other means; and it may be presumed that, in consequence of the attention which is paid to the upper eye-lids, the condition which is commonly, but improperly, called "granular," will be prevented; relapses, although frequent, will be comparatively fewer than where the antiphlogistic plan is pursued; and ulcers, so common where copious bleeding is employed, will seldom appear; and when they do appear, they are of a mild kind, and rarely imply much loss of substance." 15.

Thus, the sulphate of copper, solutions of lunar caustic, purgatives, and fomentations, constituted the treatment of this disease, not only at its beginning, but throughout its whole course. Our author avers that abstraction of blood will rarely be necessary in this complaint, if the plan recommended be strictly attended to. Whenever deep-seated and acute pain, however, denoted internal disease (which was not often the case) recourse was had to local abstraction of blood by means of leeches, after which, the parts were carefully fomented, generally with relief. Dr. O'Halloran is thoroughly persuaded that ophthalmia, in its native or characteristic form, is a disease of less danger (as regards the safety of the eye) than is generally supposed—"provided the patient be placed in a *healthy situation, to which air and light have free access.*" The loss of vision, he thinks, is owing, in nine cases out of ten, either to inflammation produced by over-distention of the eye-ball from extravasated fluid—to over-depletion by the lancet—or to ill treatment in confined apartments, where the air becomes contaminated.

2. *Chronic Ophthalmia.* It is extremely difficult in this, as in all other inflammations, to mark the limit between the acute and chronic stages. And yet it is a matter of importance to be able to ascertain the commencement of the chronic form of ophthalmia, as it may be necessary to alter the plan of cure —to remove the patient from bed into the pure air, &c. We must pass over Dr. O'Halloran's speculations, physiological and pathological, on the state of the arteries and veins in acute and chronic ophthalmia. We do not see that they add any thing towards the elucidation of the proximate cause of the disease. He acknowledges indeed that the main part of the diagnosis

must be founded on the effect of medicines. We shall give this diagnosis between acute and chronic ophthalmia in Dr. O'Halloran's own words.

"If we apply caustic or bluestone to the upper or under eye-lids in the chronic ophthalmia so as to produce a slough, the vessels, being destitute of power, are unable to throw it off in less than from three to six days; whilst in the acute stage, where the arteries are possessed of high action, the same quantity of slough is ordinarily removed in one night. This is a fact of practical importance. It furnishes us with the means of ascertaining whether the case before us be of the acute or chronic character; and no injury can result from the experiment, for bluestone is equally serviceable in both stages; in addition to this, we also find, that when the disease assumes the chronic form, the veins on the upper eye-lids, forehead, and temples are gorged with blue blood, and as they appear wholly destitute of activity, the blood which they contain is in a state of demi-coagulation; the arteries also of the ball of the eye are inordinately distended and hard to the touch; they appear destitute of the powers of propulsion." 27.

The next pathological discussion is on the *granulations* which obtain, or are said to obtain, in the eye-lids of ophthalmic patients. These granulations, our author avers, exist only in the imaginations of oculists. Similar appearances are found in the eyes of those who never had ophthalmia. But as this is a point of some importance, we shall let Dr. O'Halloran speak for himself.

"In illustration of the absurdity of the supposition of the existence of granulations in the eye-lids of ophthalmic patients, I must take the liberty of observing, that, in the first place, we see in the eye-lids of persons who never suffered from the disease an appearance similar to what is commonly designated 'granular.'—This may be proved to the satisfaction of the most prejudiced, by the examination of the eye-lids of any body of men, viz. a military corps or regiment. In every large body of men, persons are to be found, whose eye-lids are overspread by villous flocculencies or fungous productions analogous to what has been denominated 'granulations,' notwithstanding that from youth they may have enjoyed health, or absolute immunity from the affection under notice.

"Secondly, we not unfrequently observe, that a thickening of the lining membrane of the upper eye-lids, similar to what is called 'granular,' is noticeable as soon as the disease manifests itself on the eye; a fact that places in a ridiculous light this granular doctrine, which has obtained the support of some of our most respectable oculists.

"Thirdly, we find that the state of the eye-lids under notice exists in all varieties of ophthalmia, simple or complicated, watery or purulent; and as granulations, if we reason from analogy, are only produced in other parts of the human frame where pus exists, we cannot but be astonished at their appearance on the eye-lids where pus had not been seen.

"Fourthly, we find that by the plan of cure which I have recommended, the purulent discharge, however copious, is arrested in a few days; probably in a few hours; and that the disease runs its subsequent course without the production of pus; yet the state of the eye-lids called 'granular' exists whenever the cure is protracted, and it even occasionally exists in defiance of our best means of counteraction.

"Fifthly, it appears contradictory to suppose, that granulations can take place without a breach of surface or loss of substance.

"Finally, there is a considerable variety in that state of the lids called 'granular;' sometimes an appearance similar to the finest sand-paper, rough, hard, &c. presents itself; at other times a part of the eye-lid is covered with excrescences, whilst the remainder is smooth and villous. Again, we notice a great diversity in the size and elevation of those substances; the whole eye-lid is in many cases covered with them, intermixed occasionally with fatty tumours. Those appearances do not obtain in other diseases. The granulations of ulcers may vary in size and number, but they never exhibit the variety which is seen in this disease.

"From a consideration of the foregoing circumstances, I think I am warranted in concluding that granulations do not exist in this disease; that the appearances which have given origin to the conjecture (for it is nothing more,) are simply enlargements of a fungous nature from the glands and vessels, the former, if I mistake not, being far more numerous than has been supposed; that similar enlargements take place in scrofulous habits where the glands in other parts are diseased; that, in such cases, the affection of the glands of the eye-lids is sometimes the cause and not the effect, of what is called inflammation; that the vessels which are numerous, when they intersect one another in a state of distention, become united and in part obliterated, not only from the effects of the union, a stagnant state of the circulation perhaps, but from the pressure of the glands in an enlarged state; and that the whole united, and deficient in excitement, is formed into an irregular mass, which, in many instances, acquires a degree of firmness unknown in granulated surfaces." 30.

Treatment of Chronic Ophthalmia. In military practice this is a troublesome and sometimes very obstinate disease—probably from the circumstance of soldiers applying irritating substances to their eyes, for the purpose of evading duty. The sudden transitions from a favourable to an unfavourable state, could not be otherwise accounted for. "The women, children, and men of good conduct, rarely experienced such changes."

Whenever the disease of the eye-lids resisted the means of cure already described—or, in other words, assumed a protracted course, the upper eye-lids became thickened and diseased. As long as this state continued, so long were the marks of inflammation observable on the ball of the eye and inferior eye-lids.

"For the cure of the thickened state of the eye-lids, commonly

denominated 'granular,' it will be necessary to apply bluestone in substance daily, provided the irritation produced by it is of temporary duration; but should it occasion unusual pain, *which rarely happens*, it will be proper to instil, on the following day, a solution of lunar caustic into the eye, of the strength of ten grains to an ounce of water, and to foment three or four times in the twenty-four hours. Where bluestone disagrees (which is seldom the case) and the fomentations are unavailing in allaying irritation, or the lunar caustic drops possess but little efficacy against the disease of the eye-lids, recourse may be had to lunar caustic in substance, which, when slightly rubbed over the internal surface of the upper or lower eye-lids, frequently removes the irritation, and sometimes even cures the disease. The caustic in substance proved injurious occasionally; and, in one instance, opacity of the cornea followed its use when applied in force for the removal of the disease of the upper eye-lid. It ought not to be employed for that purpose; for when used to an extent sufficient to produce a deep slough, it generally does harm. Its utility, therefore, in chronic ophthalmia consists in diminishing irritability, and for that end, the slighter the application the better. It is not, however, good reason to abandon the use of a remedy, because injury is sometimes produced by it. We are warranted at trying different agents, and the daily use of remedial means is admissible, except in cases where extraordinary irritation exists. If after repeated trials they all fail of mitigating pain and allaying irritation, a respite of two or three days will be advisable, merely keeping the parts clean with warm or cold water. I think that I have saved eyes by the use of the caustic where it previously had done harm. As the irritation subsided, the employment of the caustic was attended with benefit; and the cure in all probability was effected by that remedy alone, according to the modified manner of management." 34.

But the most efficacious remedies will sometimes fail. Many causes, constitutional as well as atmospherical, occasionally interpose, so as to counteract the effect of remedial applications.

The practitioner must bear in mind that, in certain habits of body, TIME, and an attention to constitutional derangements, with change of air or climate, will effect what medicine failed to accomplish. The preventive measures against relapse consist in the occasional application of bluestone to the eye-lids during the period of convalescence.

"It is astonishing how quickly the state of the eye-lids, denominated 'granular, is removed by the bluestone, if the subject be not of scrofulous habit, or the eye-lids spongy, watery, or covered with fatty dry lumps. In the latter case, the knife will be necessary for the removal of the tumours; after which a solution of bluestone will complete the cure. *The case in question is the only one in which, in my opinion, the knife is admissible to the internal surface of the eye-lids.*" 38.

So far as Dr. O'Halloran's observations extend, fomenta-

tions with warm water are always beneficial, but washes with alumen and zinc, are useless if not prejudicial. For some criticisms on the work of Mr. Travers, we must refer the reader to the original.

Ulcers, and Lymphous Effusion. Ulcers are liable to occur in all stages and forms of ophthalmia—but they are more dangerous and prevalent in the chronic than in the acute stage; "they seem to derive their origin from two causes, viz. excess of action, and deficient circulation." In the *former* case, these ulcers do not alone affect the conjunctiva, but even portions of the cornea, if remedies be not seasonably applied. In the *second* description of ulcer, portions of cornea which had been previously nourished by blood, but which are now deprived of it, disappear by absorption, without pain, irritation, or loss of the covering portion of the conjunctiva. The ulcer in this case is clean and healthy in appearance, and not surrounded by undue vascularity. This last description of ulcer was rare in the 64th Regt. and was difficult of management, when it did occur.

When an ophthalmic patient, observes our author, whose eye is ulcerated, is confined in impure or stagnant air, it is impossible to remedy the evil by treatment. Medicine is of little or no avail; but removal to a pure atmosphere has a sudden and striking effect upon the character of the ulcer. The patient, in our author's opinion, should not, after the third or fourth day be allowed to wear a veil over his eyes, and ventilation should be free. These ulcers are remediable by the means already pointed out.

"They seldom or never appear, except where the upper eyelids are implicated; and, whatever might have been the duration of the disease, in addition to the slight application of caustic to the ulcer itself, I conceived that the use of bluestone to the eye-lids was necessary; and I have the satisfaction to say, that the good effect was generally evident in less than twenty-four hours. On the next day, whatever might be the state of the ulcer, I dropped a strong solution of caustic into the eye, and repeated it in the evening. Under the alternate use of the sulph. cup. and solut. nit. argent. (viz. ten or twenty grains to the ounce of water.) if the air of the ward was pure, the diet proper, and the state of the bowels well regulated, the ulcers generally healed in a given time. If, however, the ulcers do not yield to the remedies recommended, but continue obstinate after the disease is removed from the eye-lids, the eye itself, as influenced by the ulcer, being watery, red, and irritable, I apply the lunar caustic in substance lightly, either to the lower or upper lids; and this application, although sometimes hurtful when extensively used in cases of constitutional irritability, is generally useful by removing irritation, and inducing a favourable change in the condition of the sore." 51.

Lymphous Effusion. This was a common occurrence in protracted cases—rarely appearing in the earlier periods. Whenever unusual irritation took place suddenly in advanced stages of the disease, effusion of a lymphous character was generally observed at the superior margin of the cornea. This effusion, our author often suspected to be the product of artificial irritation applied by the patient himself. It takes place from a cluster of vessels which discharge a dusky-coloured jelly-like substance that descends to a certain point to which it seems to adhere. It seems to destroy the bond of union between the conjunctiva and external margin of the cornea. "When the newly formed parts become, as it were, organised, the irritation, which is great during their formation, subsides, and the removal of the whole is afterwards effected by the combined efforts of nature, time, and artificial remedies." 55. When lymph is thrown out in the manner described, it is difficult to arrest its progress. Topical bleedings, solutions of lunar caustic, and fomentations failed. In some later trials Dr. O'Halloran applied the lunar caustic in substance on the effused lymph, and also to the distended trunks of the vessels which poured it out. By this means the disease was arrested. He has also divided the conjunctiva over the trunks of the vessels and applied caustic to them, having previously syringed the eye for the purpose of removing the blood which the division occasioned. This plan answered where the eyes were large, but in small eyes it was found impossible to expose the vessels so as to be operated on in the manner described.

We have now finished the ophthalmic portion of Dr. O'Halloran's work, and it is evident that if the practice here delineated prove successful in the hands of others, a great advance will have been made in this branch of surgery. It is gratifying to be able to state, that a nearly similar practice has, for some time, been carried on at Chatham, under the direction of Mr. Melin, who superintends the Ophthalmic Institution of the army there, and with far greater success than attended the former depletory measures.

The portion of Dr. O'Halloran's volume, embracing the subject of remittent fever, must come under review at another time and place. We part from this zealous and intelligent officer, in the mean time, with sentiments of much esteem and respect.

III.

Recherches Anatomico-pathologiques sur la Medecine Pratique, &c. Par C. F. TACHERON, M.D.

[Third Article, continued from Vol. IV. p. 761.]

Observatio id filum ad quod dirigi debent Medicorum ratiocinia.—*Baglivi.*

I. PERICARDITIS. In the fourth volume of our Analytical Series, we brought down the analysis of M. Tacheron's work, to the section on "PERICARDITIS," to which subject we now invite the attention of our readers.

The causes of this formidable inflammation, are the same as of other internal phlogoses—but we believe it is more frequently connected with a rheumatic diathesis, or metastasis of rheumatism than with any other cause. The depressing passions, anxieties of mind, and over-exertions of the intellectual faculties are no unfrequent determining causes of this disease, especially in its chronic and more insidious form. Like other inflammations, it is acute, subacute, or chronic in its march—much more frequently in the two latter than in the first form. It is also very frequently complicated with pleurisy, peripneumony, and even gastritis. Its symptoms, termination, and pathology, will be best gathered from a faithful narrative of cases, with their dissections.

Case 1. Madame de ———, 35 years of age, of robust constitution, and formerly in good health, was confined, in an easy and natural manner, on the 13th of June 1819. About this time, a phlegmonous tumour, which had been growing some time, suppurated under the right arm. The lochia ceased rather suddenly, without any inconvenience, but the patient remained weak for some days after delivery. At length, her strength was fast recovering, the wound healing, and every thing announced complete recovery, when one day she found herself excessively thirsty, and drank a large quantity of water. This was on the 22nd of June. She immediately experienced a great sense of oppression, and one hour afterwards she presented the following phenomena;—viz. extreme præcordial anxiety—inability to lie down for a moment—lips discoloured at intervals—face slightly swelled—copious warm sweats, especially on the face—extreme difficulty of breathing—inability to spit out—pulse small, concentrated, and scarcely perceptible—great sensibility to pressure at the lower part of the sternum—violent abdominal pains—coldness of the lower extremities—faltering of speech. *Antiphlogistics and sedatives, without*

effect. 23d, The symptoms still more intense—pulse scarcely perceptible—agitation excessive—dyspnœa distressing—constant complaint of pain in the region of the heart, with tendency to syncope—great alteration of the features—loss of voice. *Blisters to the legs—sinapisms to the feet—three grains of extract of opium.* These means were productive of no benefit, and the patient expired at eleven o'clock of the same night. "The astonishingly rapid progress of the phenomena left us no time to establish the positive diagnosis of a disease whose sudden invasion and rapid march had veiled the precise seat of the affection."

Autopsia. The pleura pulmonalis adhered, by numerous bands, to the pleura costalis. The lungs, when cut and pressed, discharged scarcely any red blood, but only a frothy liquid. The pericardium contained half a pint of a slightly turbid fluid, showing some albuminous flocculi. The interior surface of the pericardium was phlogosed. The heart was perfectly sound, as was the peritoneum. The mucous membrane of the small intestine was injected, but that of the stomach was pale. There was no other organic lesion.

It is evident the autopsic appearances here, are not in a usual ratio or proportion to the previous symptoms and sudden death. They can only be reconciled by the great susceptibility of the patient after accouchment, in consequence of which, her vital power of resistance was inferior in degree to the disease, and death was the result. Individual idiosyncrasy was here strongly evinced. Many hundreds would bear a much greater advance of organic lesions, without one half the disturbance of functions exhibited by this patient.—Most of our readers will agree with the propriety of the following remark of M. Tacheron's, though few of them will be able to recognise the "celebrated practitioner of London, MASTER BAILLY." "As in this case the remedies ought to be powerful in proportion as the disease was formidable, we should have practised (in imitation of the celebrated practitioner of London, MASTER BAILLY) three large bleedings at the very beginning;—and, instead of giving opium, we should have applied a very large blister over the region of the heart."*

Case 2. (From M. Giponton.) A printer entered the hospital on the 1st Pluviose, year 7 of the Republic,† having been ill five days, but previously in good health. On examination, he pre-

* We not think our author here alludes to the late lamented physician, Dr. Baillie—but to some author of a case in one of the periodical Journals.

† We wish our French brethren would give the common dates, instead of the fantastical terms invented during the mania of the revolution.

sented the following symptoms;—viz. headach—some degree of facies hippocratica—circumscribed red spot on each cheek, more especially the left—tongue charged—some cough—abundant expectoration, slightly tinged with blood—respiration much embarrassed—sharp pain in the side (point de coté) extending from the left across the lower portion of sternum to the right, and increased by pressure—obscure sound, on percussion, over a considerable space of the left side, almost the whole of the right side sounding well—constipation—scanty urine, of a turbid appearance, with red sediment—skin dry and burning hot—pulse feeble, small, quick, irregular, and intermittent. *Venesection, diluents.* Two days passed without any remarkable changes, the countenance becoming daily more hippocratic. In the evenings there were exacerbations of the symptoms. 5th. There was nausea added to the other phenomena. *An emetic prescribed,* not without dreading the consequences. It was determined to follow up this measure with *tonics.* The emetic did no good—the patient was entirely deprived of sleep, being obliged to sit constantly upright in bed. In this deplorable condition, he lingered out some ten days more, and expired on the 23d day, from the invasion of the disease.

Autopsia. The brain sound. On cutting through the ribs of the left side, a quantity of purulent matter escaped, evidently flowing from the cavity of the pericardium, which had been opened in the section of the ribs. The pericardium was of very large size, and was computed to contain about a pint and a half of the purulent fluid. Its internal surface was coated with a thick layer of albuminous and puriform matter, with red spots interspersed. The heart was not enlarged, but its pericardial covering was thickened to the extent of two lines—a very unusual circumstance! The muscular structure of the organ did not appear to have undergone any change. The lung, on the left side, though much displaced by the enlarged pericardium, was otherwise sound. The lung, on the right side, was hepatized posteriorly, and covered with a lymphatic exudation. The interior coat of the stomach was inflamed and thickened throughout its whole extent, especially towards the pyloric orifice, which had the appearance of scirrhus. Externally, the stomach appeared quite sound.

Remarks. It is probable, as M. Tacheron observes, that the period of acute pericardial inflammation had passed before this man's entrance into hospital—and that purulent secretion or effusion had commenced, when, of course, the disease was incurable. The phenomena of the complaint, however, were strongly characteristic of its nature and seat—consequently, the case is a valuable document, and worthy of record.

Case 3. (Related by M. Pied.) Charles Lorrain, 43 years of age, of good constitution, and always having enjoyed excellent health, was seized, on the 20th of May, with difficulty of breath-

ing—shivering—cough, with little expectoration—pain extending from the epigastrium to the right hypochondrium—fever, with exacerbation at night. Received into hospital on the 22d, he presented the following symptoms, viz. face of a yellowish red colour—features contracted—slight convulsive movements of the facial muscles—moist tongue, white in the middle—respiration very much impeded, laborious, and quick—slight cough—trifling expectoration, of no particular character—no stool for two days—epigastrium and right hypochondrium painful on pressure—slight heat of skin—pulse small, contracted, quick, regular. *Two bleedings from the arm—diluents—calmants.* The pain in the parts above mentioned, was mitigated by the bleedings, and a blister removed it entirely; but the other symptoms were not relieved. The night between the 23rd and 24th was passed in a state of great agitation and delirium—and at 4 o'clock in the morning he expired.

Autopsia. The left lung was sound, except that its inferior surface was covered with a recently-formed crust of coagulable lymph. The inferior lobe of the right lung was similarly circumstanced, and, in addition, was engorged, as after severe peripneumony. The whole of the thoracic surface of the diaphragm, and the posterior portion of the pleura were covered with an inflammatory crust, rather thin, and easily elevated, leaving the subjacent tissue reddish and injected. The abdominal surface of the diaphragm was perfectly sound. The exterior surface of the pericardium was also covered with coagulable lymph to a considerable extent, and the structure underneath very finely injected. The pericardium itself was filled with a serous or whey-like fluid; and some of the same kind of fluid was extravasated in the cavity of the chest. The internal surface of the pericardium, (both its loose and reflected portions) was covered with an inflammatory crust. The muscular structure of the heart was sound.

It is evident, that here we had an exquisite case of pericarditis, and yet some of the characteristic symptoms of the disease, as laid down by authors, were wanting, viz. syncope, irregularity of pulse, burning pain in the region of the heart, &c. On the contrary, the pulse was regular—there was no very violent pain in the region of the heart—and syncope did not exist.

Case 4. Lefebure, 64 years of age, a voiturier, of apparently good constitution, and never before having experienced any serious illness, was upset in his voiture, and one of the wheels passed over the lumbar region. The next day, he had considerable dyspnœa—frequent cough, with bloody expectoration. This state continued, with little alteration, for two months, at which time the symptoms assumed a greater degree of intensity, and forced the patient to enter the hospital, on the 6th of April, when he presented the following phenomena:—features little altered—lips injected—voice hoarse—

cough—sanguinolent sputa—sound of the chest, on percussion, clear at the upper, but obscure at the lower part, especially in the region of the heart—action of the heart very irregular—when the hand was applied over the region of the heart, it conveyed the idea of a fluid there—occasional sense of suffocation that greatly interrupted the patient's sleep. 30*th April.* The feet and legs infiltrated. Aperient medicines excited the cough, and renewed the sanguineous expectoration.

Between the 1st and 14th May, the disease made great progress. The effusions extended to the hypogastrium—pulse became extinct at the wrists—pain great and deep under the left breast—motions of the heart small and irregular—diarrhœa. Died on the 14th of May.

Autopsia. On opening the chest, there appeared traces of recent inflammation on the pericardium, in the form of an albuminous membrane. The origin of the pulmonary artery was dilated to a great extent—and the ventricle itself much enlarged. The inferior portion of each lung was hepatized. All the other organs of the body were sound.

Case 5. Charles Baubey, 39 years of age, of apparently good constitution, experienced, about two years ago, after a severe cold, a rheumatic affection of various parts of the body, which left him unable to work at his trade. Afterwards the feet swelled at times, and he had occasional palpitations of the heart. For three months the disease became greatly aggravated, and during fifteen days he could not lie down in bed, so great was the sense of suffocation. The lower extremities became excessively œdematous—his pace puffy. On the 3rd of January 1810, he entered the hospital, presenting the following phenomena: decubitus impossible on the left side—cephalalgia—sleep much interrupted, startings from sleep—confusion in his head—face puffy—tongue white, but moist—respiration greatly impeded—frequent cough—bad sound, on percussion of the chest—great action of the heart—pulse small and frequent—little appetite—thirst intense—alvine dejections scanty, as also the urine—œdema of the lower extremities.—*Ptisans, &c.* From the third till the 21st of January, the symptoms became gradually aggravated, and death took place at the last mentioned period.

Autopsia. The right lung was adherent to the costal pleura by false membranes—and the left adhered still more intimately, and was gorged with sanguineous mucosities. The pericardium adhered to the heart throughout, and was thickened in structure, red in colour, and covered with an inflammatory crust. The substance

of the heart was flaccid, and easily torn—the parietes of the left ventricle were thickened. Some effusion was found in the cavity of the abdomen; but no other lesion in any part.

Case 6. Louis Martigny, 33 years of age, of bilio-sanguine temperament, began to lose his appetite, in the beginning of April, having a bad taste in his mouth. To these symptoms succeeded cough, with difficult respiration, oppression about the chest—decubitus facilis—short and interrupted sleep, in consequence of the cough. During the succeeding days, the symptoms became exasperated with the exception of the expectoration, which was more easy and copious. Towards the end of the month, the difficulty of breathing, and palpitation of the heart, were very considerable. 1*st May. Leeches to the anus.* No relief. The legs begin to swell—the sleep is more and more interrupted. 13th. Emaciation has commenced—the face has an earthen hue—lips blue—tongue charged—anterior part of the thorax sounds well, with the exception of the præcordial region, which emits a dull sound on percussion. The inferior part of the left side of the chest emitted no sound at all. The action of the heart was strong and tumultuous—cough very frequent—respiration slow—great tension and swelling in the region of the stomach—urine copious and clear—pulse scarcely perceptible in the left arm—quick, small, and contracted in the right—legs and thighs œdematous—can only lie down on the left side, and that for a very short time. From the 14th to the 30th, sometimes better, sometimes worse. From that time to the 30th June, the symptoms gradually augmented, and death took place at the last mentioned date.

Autopsia. Infiltration general, but more particularly so in the face and extremities. The lungs adhered by bands to the costal pleura—about a pint of yellowish fluid in each cavity of the chest—pericardium adherent to the left lung—anteriorly it was thickened, rough, and covered with a kind of organised membrane internally, which was connected with the heart by several bands of old formation. Between the heart and pericardium there was a considerable quantity of serous effusion. The heart itself was double its natural size. The parietes of the right ventricle were extenuated. There was nothing particular in any of the other organs.

Case 7. Claudine Novere, aged 47, had enjoyed good health till the age of 46, when the menstrual secretion ceased. In consequence of a fright, she had an attack of apoplexy, which was not followed, however, with any bad effects. On the 14th of March, after exposure to a hot sun, she fell down

senseless, and, four days afterwards, was carried to the hospital, where she presented the following symptoms, viz. hearing perfect, but her utterance was unintelligible, paralysis of the left members of the body, face puffed, eye-lids closed, pupils dilated, mouth drawn, tongue black but not dry, pulse full, hard, and quick; skin warm and moist, abdomen tense, belly constipated, urine natural. *Decoction of bark—whey—ptisans—camphor, &c.* 23rd March. Faintings—articulation more free—tongue less black—other symptoms the same. 24th. Subsultus tendinum. 26th. Died.

Dissection. The vessels of the brain were rather turgid—some spoonfuls of clear serous effusion in the ventricles, and at the base of the brain. Both lungs infiltrated, and but little crepitous. At least a pint of thick yellowish fluid in the pericardium, with albuminous flocculi floating in it. The whole of the pericardium (both the free and reflected portions) was covered with a crust of false membrane, half a line in thickness, and of a yellow colour. There was a livid spot near the apex of the heart, an inch square. The parietes of the ventricles were double their natural thickness, their cavities being extremely contracted, as were both the auriculo-ventricular orifices. Abdominal viscera were sound.

Remarks. The above is a very singular case. We see the cardiac disease, which was of enormous extent, almost entirely masked by an affection of the brain, which yet left very faint traces of its existence after death. Very few would have given a correct diagnosis in this instance.

We think the foregoing cases sufficient to make the young practitioner acquainted with the prominent pathological features of pericarditis and hydro-pericarditis. As such, we record them for his perusal.

II. PERITONITIS. The great attention which has been paid, in this country, to puerperal fever, or puerperal peritonitis, has rendered us better acquainted with the pathology of inflammation of the peritoneum, than with almost any other disease. Our medical literature is defective, however, in *post mortem* examinations of peritonitis happening in other than puerperal patients. On this account, we may probably be pardoned for presenting one or two specimens from the stores of our continental brethren, who have such ample opportunities of cultivating pathology in their public hospitals, and who, to do them justice, investigate, with great assiduity, this important branch of medical science.

Case 1. A man of athletic form, and 42 years of age, entered the Hotel Dieu on the 27th of May, at 2 o'clock, p. m.

The only particulars that could be learnt, were the following, viz. after violent exercise he was suddenly exposed to cold. This was followed by slight pains in the abdomen, and some bilious symptoms. *An emetic had then been taken.* Afterwards came on vomitings, and pains in the lower belly. On entering the hospital, these pains were extreme, and greatly exasperated by the slightest pressure—abdomen tense and distended, presenting an oblong swelling, corresponding with the convolutions of the small intestines—suppression of urine for 18 hours past—breathing short and embarrassed—tongue red and moist—pulse slow and small—face pale—countenance depressed—general perspiration of a thick and viscid kind—heat natural—anxiety—spasms—decubitus dorsalis—inability to lie on either side—wandering of the intellect—*Twenty-four leeches to the abdomen*—in one hour afterwards, *thirty more leeches were applied to the vicinity of the anus—a large bleeding from the arm—injections, &c.* After the venesection, fainting succeeded, with vomiting of greenish matters—the urinary secretion reappeared. *Reapplication of thirty leeches.* Died in the evening.

Dissection. Abdomen tense and distended—an effusion therein of about two pints of yellow serum mixed with flocculi—all the intestines were coated with an albuminous crust, in the form of false membranes. The lungs were sound; the heart, on its anterior surface, was covered with a kind of false membrane; the parietes of the left ventricle were double their natural thickness, and the cavity exceedingly small. No other organic change in the body.

Remarks. M. Tacheron observes, that, in this case, the peritonitis was of the most intense kind—and in this we agree with him. We grant, also, that the patient died the same evening—but not "*malgré le traitement rationnel le mieux dirigé à l'hospice,*" for every man at all conversant with the bedside of sickness, ought to have known that the patient was dying when he entered the hospital, and that the complaint had advanced to a stage which utterly proscribed the lancet. The effusion—the false membranes, were all in existence on the morning when he entered the hospital, and, therefore, the outrageous system of depletion pursued, was as injudicious as the timid ptisan practice so generally employed by M. Tacheron's countrymen, in the beginning of inflammations, when alone the vigorous system of depletion is advantageous. But there is a tact—a discrimination *in the application* of therapeutical agents, almost independent of a knowledge of pathology or therapeutics themselves. This tact was not well evinced in the treatment of the case just stated.

Case 2. Eleanor Arnault, 21 years of age, was seized, on the 25th of March, with sharp pains throughout the whole of her abdomen, with difficulty of breathing, and restlessness. On the 28th, she entered the Hotel Dieu, presenting the following symptoms: face shrunk, and countenance depressed—decubitus dorsalis—sharp superficial and diffused pain over the whole abdomen, which was very tender to the touch—breathing short, and performed apparently by the dilatation and contraction of the chest alone—sense of fluctuation in the abdomen—debility—pulse small, sharp, and quick—heat moderate—skin dry—constipation obstinate—*twelve leeches to the vagina—whey—fomentations—soups.* 29th, temporary alleviation of the symptoms. In the evening an exacerbation. 30th, same situation—belly more tense—fluctuation evident. *Ten leeches to the anus.* 31st. No better. The pulse is small, contracted, and depressed. *Venesection—emollient lavements.* 1st April. The sufferings a little mitigated—pulse less quick, but harder—nausea and hiccup at times—fetid eructations—abdomen more bulky, and uniformly tense, with great sensibility on pressure—great evening exacerbation. 2nd. Pulse small and concentrated—urine yellow—abdomen hard and painful, with a slight ecchymosis at the lower part—all the bad symptoms aggravated. This state continued till the 5th of April, when death put an end to her sufferings.

Dissection. The lungs were sound, as was the heart. On opening the abdomen, between five and six pints of an opaque white liquor flowed out, of extremely fetid odour, and containing albuminous flocculi. The whole abdominal cavity was lined with a false membrane, easily separable from the subjacent parts, which were red and thickened. All the viscera were glued together by this inflammatory exudation, which was soft, and evidently of very recent formation. The peritoneal sheet had also a dark appearance.

Remarks. The above is an exquisitely marked case of peritoneal inflammation proceeding to a fatal termination, unchecked by remedial means; for we cannot give the remedies employed here the least credit for even mitigating the dreadful ravages which were going on internally. Our author brings forward several cases of puerperal peritonitis, but they do not differ materially from those already adduced. In this country, the effusion into the cavity of the abdomen is generally seen in fatal cases; but the exudations of coagulable lymph are comparatively rare, in consequence of the more active treatment on this, than on the other side of the channel.

IV.

Cases of Diffuse Inflammation of the Cellular Texture, with the Appearances on Dissection, and Additional Observations. By Andrew Duncan, *Jun.* M.D. &c. &c. &c.

[Ed. Transactions, vol. I. p. 470 to 670.]

We have deemed it proper to devote an entire analytical article to this paper (though an insulated communication in a volume of Transactions) for three reasons—the great length of the Essay, 200 pages,—its great importance,—and the great respectability of its author. The high interest of the subject cannot be questioned, when we consider that it treats of a dreadful affection, which is a constant source of danger to ourselves while engaged in pathological investigations;—and not rarely to our patients from the operation of phlebotomy.

The variety of inflammation now to be considered, is one of frequent occurrence—generally severe—and sometimes fatal. As it has not attracted commensurate attention from systematic writers, Dr. Duncan has laid his brethren under deep obligations by his attempt to collect, condense, and reduce into order, all the information on the subject which his extensive reading, and no less extensive correspondence, enable him to procure. He justly observes, that medical science has been retarded by excessive deference to the opinions of celebrated men; hence, a fashion prevails even in diseases, or rather in the names affixed to them. Those which were once considered as common, cease to be mentioned; while others, recently described for the first time, are soon found to be by no means rare. We believe with our able author, that it is highly probable, that ever since phlebotomy came into general use—and morbid anatomy to be cultivated, the same untoward accidents have happened that now frequently attract our attention. But their pathology was not understood. At one time, the mischief was attributed to the prick of a nerve; at another time, to that of a fascia; then inflammation of an absorbent vessel, or of a vein, &c. Dr. Duncan thinks, and probably with reason, "that the share which a diffuse inflammation of the cellular tissue has in these affections has been still overlooked." Our author modestly acknowledges that he may have gone to extremes, and included in "diffuse inflammation of the cellular texture," some which are of a different nature. "But such an error cannot hurt the progress of medical science, as it may lead to investigation and the establishment of truth."

Dr. Duncan divides this Essay into two sections, the *first* containing the facts or cases, on which are grounded the principles developed in the *second* section. This plan, which is the well known one that Bacon long ago recommended to physicians, is the best that can be adopted, and, therefore, we shall follow our intelligent author in his own track.

Case 1. *From Venesection.* Hugh Snell, æt. 60, affected with diabetes, was bled in the Royal Infirmary, 8th January, 1820, and on the 12th complained of pain in the arm, which was inflamed at the puncture. *Poultice applied.* 13th. Had no rest last night—arm very much inflamed, tense, and swoln. *Saline cathartic—poultice.* 14th. Consultation of surgeons. Arm much swoln, with great tension and acute pain—no red lines. The swelling and tension were uniform from the fingers to the highest part affected. *Twelve leeches—cold saturnine cataplasms.* 15th. Slept better—inflammation still advancing towards the shoulder—pulse 104—tongue white. *Twelve more leeches—cold lotions.* 16th. Slept none—swelling has reached the shoulder—headach and faintness—pulse 120. *Sulphate of magnesia* 3j. 17th. Leeches to the pectoral muscle, where the swelling now had reached—warm anodyne fomentations—a dark coloured bull near the elbow, and general vesication of the surface—great œdema of the hand—complains that his throat is quite closed. Died after the visit.

"*Dissection.* The orifice made by the lancet was yet open, and readily admitted a probe, but there was no inflammation of the vein, no thickening of its coats, and no effusion into it of coagulable lymph or pus. The cellular structure of the arm was universally gangrenous, distended with sanious fluid, and the muscular fibres dark coloured, tender, and literally rotten. The gangrene extended over the pectoral muscles of the affected side, and terminated exactly at the mesial line, forming a striking contrast with the healthy flesh of the opposite side. The lungs collapsed naturally, no tubercles, no adhesions; a small polypus, was in the right auricle of the heart, in which, and in the commencement of the aorta, there was a slight blush of inflammation. (The blush, here ascribed to inflammation, was more probably the tinging of the tissue, by the contact of blood after death.) Nothing peculiar was observed in the kidneys and renal vessels; mesenteric glands soft and cheesy; stomach greatly distended, its coats thickened; spleen blanched, and smaller than usual; liver healthy, gall bladder empty, omentum pellucid; and a general want of adeps throughout the body, as is usual in diabetic cases." 477.

Case 2. Ann Ralston, æt. 23, had long suffered from a succession of scrofulous abscesses, and was admitted into the

Infirmary on the 8th May 1821, for a tense elastic swelling of the abdomen, with a sense of internal fluctuation. The urine was scanty and high coloured—but on the 12th it suddenly became copious, and without urinous smell or taste. On evaporation it proved to be diabetic. On the 24th, she was bled in the arm, the serum of the blood exhibiting a milky appearance. 25th. She passed twelve pints of urine. 26th. Was seized with pain in the bend of the arm—sickness and vomiting—pervigilium. There is a slight blush and a diffused swelling, with great tenderness round the wound—and these symptoms are all increasing—pulse 120, very full—great thirst—urine, 15 pints. *Ten leeches and a cataplasm to the arm—sulphas magnesiæ.* 27th. A bad night—constant retching—arm more swelled—pulse 130, and full—*venesection to* ℥xxiv. Blood buffy—no abatement of pain—nausea. 28th. Pain and swelling increased—some ichor discharged from the lancet-wound—frequent retching—urine scanty and turbid, with urinous smell. *One grain of opium—four ounces of wine daily—cold lotion.* 29th. Had a bad night—swelling extended to the chest, with great fulness and tenderness—a large vesication on the inner part of the arm, surrounded by a livid margin—skin underneath insensible. The symptoms went on increasing during the next two days, when death closed the scene.

"*Dissection.* On the 2d of June, at 8 *a. m.*—Externally upon the sternum and under both clavicles, particularly the right there was much livid colour, and many small vesications. Upon the right side, immediately under the ribs, very extensive vesications had arisen, from which the water had been evacuated, and the cuticle partly removed. The same livid colour and vesications appeared upon the right shoulder, running down the back. Upon removing the integuments from the lancet-wound of the right arm upwards, a considerable quantity of serum was discharged, and some purulent matter was found in the cellular membrane which was not destitute of fat. The integuments being further removed, the muscles of the arm and chest came into view, which discovered the chief seat of the disease. The *biceps* and *pectoralis major* muscles were nearly black, and in a state approaching to gangrene; the texture, in some places, was so far destroyed that it could be broken down by the finger; this was particularly remarkable in the *pectoralis major*. The smaller pectoral muscle was also slightly affected upon its surface.

"A probe was then introduced into the vein, which was laid open as far as the axilla. The vein was found to be perfectly healthy, and appeared not to have participated, in the slightest degree, in the surrounding disease. Its internal surface was white, and its tunics sound and healthy.

"In the thorax nothing morbid was observed.

"The abdominal viscera also were healthy, and, with the exception of the kidneys, which were thought by some to be rather larger than natural, no deviation from healthy structure was observable." 483.

It is curious that both these cases should have been diabetic—and that dissection disclosed no material lesion of any vital organ. This may be owing to the early stage of the diabetes, in which the patient was cut off, before organic changes became prominent. But the fact is, that lesions of structure are not a necessary accompaniment, much less a cause of diabetes.

Case 3. Michael Dogherty, aged 31, was admitted into the fever hospital on the 14th April 1821, with the usual symptoms of continued fever. Next day, he was bled to 20 ounces. The second night after bleeding was restless, and on the third day he had pain in the arm, the wound having suppurated, and the edges being everted, with a slight surrounding inflammation. On the 5th day, the pain was much increased, extending from the fingers to the shoulder—much inflammation and hardness for a space of three inches above and below the wound, from which pus could be pressed—pulse 104 and feeble—much febrile heat—countenance anxious and oppressed. 7th day, inflammation extended upwards and downwards—constitutional symptoms continue. 11th day, the whole arm inflamed and œdematous, with great pain on the least motion—a rigor in the preceding night, followed by delirium—great uneasiness across the chest—stools dark. 13th day, constant sighing—delirium—pain of chest—feet and legs œdematous—difficult articulation. 24th day, a large sphacelation over the sacrum—other symptoms the same. 27th day, the wrist of the other arm has swelled, and there is a distinct fluctuation in it. 30th day, terminated his earthly career.

"*Dissection.* The body was much emaciated. On removing the integuments from the right arm, the subjacent cellular tissue was found considerably altered in structure, being converted into a firm ligamentous-like substance, and with difficulty separated from the surrounding parts. The *mediana longa*, from the back of the thumb to its termination in the median cephalic and basilic, presented the appearance of a nerve, being somewhat of a fibrous structure, but resembled an artery when cut transversely, the cut extremities presenting circular orifices, and not collapsing, as in healthy veins. When slit open, its coats were greatly thickened, and its surface lined with a thick layer of coagulable lymph.—About the middle of the fore-arm, a small abscess formed in the vein, but was prevented from extending by the coagulable lymph. About two inches above the bend of the arm, the cephalic and basilic veins were filled with pus, and their coats were uncommonly thin and easily ruptured. This appearance extended to the

axillary vein, and terminated abruptly before the vein crossed the first rib. The vein remained quite pervious, though its cavity was much diminished, neither did it contain a particle of blood, nor could its valves be observed. Between the first and second ribs, near to their sternal extremities, an opening was discovered leading into a sac, formed by an adventitious membrane of coagulable lymph, filled with purulent matter, and pushing inwards the *pleura costalis*. The sac contained four or five ounces of pure pus. At the left wrist there was a similar collection of matter, containing about six ounces of pus. The lungs were perfectly healthy in their structure, but several old adhesions existed between the pleuras in both sides. The heart was natural and healthy; but on the left side there was a deposition of coagulable lymph on its external surface, and the inner coat of the aorta to its arch had a deep red appearance. The other cavities were examined, but nothing of any importance was found." 486.

Cases 4, 5, 6, of the Essay were severe but not fatal, from venesection; we shall, therefore, pass them over, and come to case vii.

Case 7. Mary Macgregor, ætat. 58, had had the right mamma successfully removed for scirrhus ten years previously, and was readmitted on the 1st September 1821, for a scirrhous tumour in the axilla of the same side. This was removed on the 8th, and a vein was tied in the operation. 9th, Had a rigor in the night, followed by fever this morning—complains of pain of breast and of arm—vomits all liquids. 10th, Gastric irritability continues, with pain at the ensiform cartilage. Constipation. Leeches to the epigastrium. 11th, Nausea sine vomitu—tongue foul and dry—pulse 108—no stool since the 8th—thin unhealthy discharge from the wound. These symptoms continued till the 16th, when the patient died.

"*Dissection.* The parietes of the cavity left by the tumour were found in a sloughing state. The neighbouring muscles, particularly the *pectorales*, *teres major*, and *latissimus dorsi*, were quite black, and yielded to the slightest violence. In their interstices there was much effusion of a yellow substance, resembling coagulable lymph. A ligature was found round the axillary vein, about an inch below the entrance of the cephalic, and another upon the subclavian, a little above the entrance of the cephalic. A clot, about 1½ inch long, was formed in the axillary vein, below the ligature, and a firm yellow fibrous clot, not quite so long, in the subclavian, above the ligature. The internal coat of the vein below the ligature seemed inflamed. The coats of the vein, from the upper ligature to the entrance of the external jugular, were much thickened, so as to resemble the coats of an artery. The portion of vein between the ligatures was much shrunk on the side next the axilla, and a small puncture was distinctly visible between them.

The coats of the ascending cava, right auricle and ventricle, were very dark coloured." 494.

This brings us to cellular inflammation from punctures and cuts received in dissection; but as we have published so many cases of this kind in our Journal, we shall select but a very few from the Essay before us, and those chiefly of fatal issue, where dissection rendered the cases more perfect.

Cases 1 and 2. Two medical gentlemen (Messrs. Blyth and Young) examined the body of a young woman on the 28th December—the body presenting no uncommon appearance externally, emitting little or no putrid smell, and being very emaciated. There was much sero-sanguineous fluid in the chest, in removing which, with a tea-cup, Mr. Blyth's hand came frequently in contact with it. Mr. Young put his hand only once into the thorax, to squeeze the lungs. In a few hours after the dissection, Mr. B. felt a slight smarting on the fore-finger of the right hand, and, on examination, perceived a very slight abrasion of the cuticle, not larger than a pin's head. He applied a bit of sticking-plaster, and thought no more of it that day. Next morning, on going out, he felt very chilly, though the air was very warm for the season. Throughout the day, he felt languid and depressed, and towards evening became quite ill. Dr. W. Campbell was called in, and immediately bled him from two veins, but very little blood could be obtained.* In the same evening a lancinating and excruciating pain took place in the glands of the right axilla. On the same evening Mr. Young became affected with the symptoms which usually characterise typhus fever. He also had an abrasion of the cuticle in one of his fingers, but there was no appearance of surrounding inflammation, tenderness to pressure, or pain. In his axilla, as in that of Mr. Blyth, was the first appearance of local affection. From the glands of the axilla, in both cases, there was a diffused and painful swelling, with considerable redness up along the neck, and for several inches down along the side. The swollen parts did not pit on pressure, but gave an obscure sense of fluctuation, which has been well characterised by Mr. Lizars by the term *boggy*. A lancet was plunged into

* We have often, in the course of this Journal, and in our practice, objected to the principle of blood-letting in the forming stage of fever, when there is chilliness, depression, and where the reaction has not fairly set in. It is a good principle to bleed *early* in fever, if you are to bleed at all. But surely this applies to the reaction of fever, and not to the languor, chilliness, and depression which generally precede such reaction.

the swelling on Mr. B's side, but nothing except a little blood issued. A number of leeches were now applied to the parts affected—and a blister to the thorax, which did not rise well. Mr. B. became very restless, without delirium, which state continued several days and nights. Anodyne antimonial draughts failed to procure sleep, and the patient suffered much from thirst, which no drink could quench. This state continued eight days, the diffuse swelling extending down the side, with increased redness of the skin. The pain and inflammation then gradually diminished—the cuticle peeled off, and they were congratulating the patient on his fortunate escape, when one morning a quantity of pus was seen to issue from the puncture made in his side at the beginning of his illness. An abscess was now discovered, extending as far as the ilium, and nearly to the pubes. Several punctures were necessary for the exit of matter. Much matter, mixed with shreds, continued to discharge for many days. He appeared to be recovering rapidly, when an aphthous sore mouth took place. "The whole of the fauces, as far as they could be seen, was encrusted with a thick layer of coagulated albumen, which was no sooner detached than it was renewed." Deglutition was very difficult and painful, and the secretion of viscid saliva was excessive. A blister to the throat was the only thing that gave any relief. An alarming and distressing hiccup now occurred, which was at last removed by sipping small quantities of milk and water. At length convalescence was established, and health restored.

Mr. Young's case, though strikingly similar in its commencement and early progress, was not so fortunate in its termination. The symptoms and treatment were the same as in the case just related, and recovery was confidently expected when Mr. Y. was suddenly seized with a high degree of pleuritis that did not yield to venesection. In the evening of the same day he became outrageously delirious, and died next morning, 4th January 1822.

"*Dissection.* An incision was first made from the clavicle to the crest of the os ilium, and another crossing it to the axilla, when the subcutaneous cellular substance appeared in some places distended with serum, especially about the loins, while in others it was turgid with purulent matter, which was most conspicuous over the *pectoralis major*. On prosecuting the dissection, the whole cellular substance of the side, from the axilla down to the os ilium, and from the spine to the sternum, was more or less purulent; the cellular sheaths of the *latissimus dorsi*, *serratus major anticus*, *pectoralis major* and *minor* muscles, were all purulent; and even the prolongations of the cellular membrane, which divide the muscles into their different fasciculi, were equally purulent. Between the two pectoral muscles, and beneath the *minor*, the infiltration of the

cellular substance with purulent matter was very conspicuous.—The carneous fibres of these muscles had, in general, lost their cohesion, and were of a dirty-yellow colour. The intercostal muscles were pretty sound, but the external surface of the pleura beneath them was highly inflamed, and the vessels bold and distinct, and conspicuously ramified.

"In the axilla there were numerous small collections of purulent matter, as if it had been secreted into the cellular tissue. The lymphatic glands were enlarged and inflamed, but had not suppurated. The nerves possessed their natural colour, so did the axillary artery, and even its branches, with the exception of those immediately supplying the axilla. The vein in some parts had a dirty-red appearance, and the small branches coming from the axilla were immersed in purulent matter, and had lost their tenacity.

"The dissection was next carried down the arm: the brachial vein, as well as the median-basilic, was slightly red in several places, and a twig of the internal cutaneous nerve presented an inflamed appearance, which, however, ceased at the bend of the arm. The cellular substance of the arm was every where healthy, and there was not the slightest vestige of disease in the fore-arm, nor could any connexion be traced between the abrasion on the finger and the morbid parts.

"The thorax was now examined: the pleura of the right side, which has been already mentioned as inflamed on its outer surface, was much more so internally. Here its colour was deeper, and the inflammation was in patches, extending over the whole surface of the cavity to the mediastinum and pericardium. The surface of the right lung had a white appearance, from coagulable lymph effused upon its *pleura pulmonalis*, which was considerably thickened, but the substance of the lung itself was healthy. In the cavity of this side of the chest, more than three pints of bloody serum, with flakes of coagulable lymph floating in it, were found. The pleura and lung of the left side were perfectly healthy, but some bloody serum was found in the cavity, though not nearly so much as on the right side. The *vena cava discendens*, and the right auricle of the heart, appeared inflamed, but the other cavities were healthy, and all of them filled with blood, part of which had an appearance of fibrine. The walls of the ventricles, when cut across, were darker than natural." 502.

Passing over some cases which were not fatal, we come to a very short notice of Dr. Dewar's melancholy end. This gentleman pricked a finger of his *left* hand slightly, while examining the body of an enteritic patient, on the 13th February 1823, and immediately applied caustic to the wound. On the 14th he remained in bed, complaining of languor, general debility, and rigors. On the 16th, the *left* axilla became exceedingly painful, without much swelling of the part, or any hardness in the course of the absorbents on the arm. Leeches were applied to the axilla, with great relief to the pain. On the 18th, one of his medical friends was sent for, on account

of an accession of pain in the *right* fore-arm, with some swelling and redness. Leeches were immediately applied, but without affording any relief, for the inflammation and swelling extended rapidly. He was bled from a vein, and the blood was sizy. Early in the morning of the 19th, he became insensible, and died in the evening of the same day. "The symptoms throughout were those commonly called typhoid." The body was not examined.

A curious case follows, which our author says was *not* fatal, though the patient died on the 11th day of the disease.

Mr. Cumming, a medical practitioner, was a spectator at the dissection of a young woman who died of puerperal fever. He did not touch the body, and only introduced a fresh thread into a needle employed in sewing up the abdomen. He was not aware of any puncture or abrasion. About eight hours afterwards he felt an uneasy sensation in the middle finger of the *left* hand, at the inner side of the flexure of the first joint, where, on examination, was found an angry pimple. He passed a restless night, and towards morning had a severe rigor succeeded by pyrexia. Next day (1st Oct.) he was visited by Dr. Fairbairn, who observed a sero-purulent fluid oozing from the pimple. A poultice was applied. The following day, (2d Oct.) the parts about the axilla and under the pectoral muscle were greatly swelled, and painful on being handled, conveying an elastic feeling to the finger, accompanied by fever, violent headach, and great constitutional disturbance. He was bled four times from the arm—had 24 leeches applied twice to the shoulder—diaphoretics and cathartics internally —anodyne astringent lotions externally. Under this treatment, the symptoms greatly subsided in four or five days—and the swellings were so much reduced, that the patient could move his arm freely. On Saturday evening, the 7th of October, a deep-seated swelling, the size of a pigeon's egg, was discovered in the *other* arm, between the wrist and the elbow, which was circumscribed, with some redness and pain on pressure. 8th. The swelling had increased considerably, occupying nearly the whole fore-arm, with an erysipelatous appearance. The pulse, at the wrist, could be but obscurely felt. 9th. The tumefaction has increased to an alarming extent, reaching from the fingers to the *acromion scapulæ*. The parts are evidently gangrenous. 10th. Death took place this day. The body was not examined.

The next case is remarkable, when taken in connexion with the preceding. A towel which had been used instead of a sponge during the dissection, which proved fatal to Mr. Cumming, was washed in the evening by Mrs. Edie, who got one of her fingers scratched by a pin in the said towel. She felt

the part painful next day—and had shivering, headach, and pyrexia. Inflammation and swelling soon extended from the finger up the arm, attended with excruciating pain. *Venesection—a dose of salts.* On the 4th day, she was seen by Dr. Fairbairn, when the inflammation and swelling were as high as the elbow, and had an erysipelatous appearance. Several glands were also enlarged and painful. The constitutional symptoms were severe. *Venesection twice—diaphoretics and cathartics.* Under this treatment the inflammation was partially checked, and the fever somewhat subdued. Matter at length formed in the palm of the hand, and was discharged by incision. She recovered.

We must now pass on to the second Section of the Essay, containing "a general account of the diffuse inflammation of the cellular substance," commencing with—

I. *The Etiology.* *Venesection* is the first cause which is commented on by Dr. Duncan. Instances, satis superque, are cited from Ambrose Paré, Hildanus, Dionis, O'Halloran, Abernethy, Charles Bell, and others, to show how frequently phlebotomy is followed by this intractable and dangerous species of inflammation. *Ligatures to veins* is the next cause enumerated, and the subject illustrated by reference to the cases published by some modern authors, especially Sir Astley Cooper, and Mr. Travers. *Dissection-wounds*, however, have proved to be the most fatal if not the most frequent source of the inflammation under review. The cases already stated—and those published in various journals and transactions, are adduced as satisfactory proofs on this point. *Inoculation by morbid secretions of living animals*, is brought forward by Dr. Duncan, as another source of cellular inflammation, and cases are adduced from Chaussier, Sir E. Home, Dr. Patrick Russel, and others, in illustration. *Acrid matters* directly applied to the cellular substance, appear, from the experiments of Orfila, to be capable of exciting this peculiar species of inflammation. In fact, pricks, and wounds, without any morbid poison—sprains—external violence, are all capable, in some cases, of giving rise to the disease—and, lastly, it has arisen spontaneously, or, at least, without any known cause. *Erysipelas phlegmonodes* is very properly considered by Dr. Duncan as one of diffuse inflammation of cellular tissue, of which we have seen numerous instances, and many of them fatal.

Phlegmatia dolens, our author thinks, must be explained on the principle of diffuse inflammation of the cellular structure, as ably maintained by Dr. Hull of Manchester.

"Indeed, those cases which have been examined after death, show the same destruction of cellular texture, the same extensive suppuration that we observe in *erysipelas phlegmonodes;* so that these diseases differ chiefly in their exciting cause, and in the total absence of cutaneous inflammation in most cases of *phlegmatia dolens.*

"This view of the pathology of this disease has been strikingly confirmed by the dissection of a case by Professor Casper, in which the cellular membrane was extensively inflamed, *and the blood-vessels, on careful examination, ascertained to be without disease.*" 583.

Did this case of Casper's elude the erudite researches of Dr. Davis? Certes he ought to have noticed it, although it goes directly against his theory. Casper distinctly says:—"Percautè retiximus vasa magna sanguifera, omnino verò sana visa sunt et in externa et in interna superficie."* The cellular membrane was diseased throughout the whole limb, and even in the pelvis.

"It is more probable, that the disease partakes of the nature of an epidemic. At least, severe and fatal cases have been more common of late, than at any preceding period. Nor can I ascribe this to the disease having been described under another name, or having escaped observation, for the symptoms are too severe, and the death, when it happens, too sudden to be overlooked; and yet we find few such cases recorded under any denomination.

"The causes why this disease should be more frequent at one period than another, are quite unknown to us. It does not seem to be connected with temperature, or any of the ascertainable atmospheric states; for it has occurred at all seasons of the year. Nor can it be ascribed to any deficiency of wholesome food. It is, however, worthy of remark, that severe and fatal cases occurred when other congenerous, though slighter diseases, were very common." 586.

Thus, in Edinburgh, for the last four or five years, a great disposition to erysipelas has been observed, not only in hospital, but in private practice. Our observations, as Dr. D. observes, are too few to enable us to draw any conclusion as to the influence of situation, and those causes which produce endemic diseases. It is generally supposed to occur more frequently in large cities than in the country—and more frequently in crowded hospitals, than in other situations.

Upon the subject of the *predisposing causes*, Dr. D. has little to adduce. Some cannot handle the viscera of a recent body with impunity, although there be no breach of structure in the skin; while others have often pricked and cut themselves without any bad consequence. Leech-bites always fester

* Commentarius de Phlegmatio dolente. Auct. J. L. Casper. 8vo. Halle, 1319.

on some skins, while other surfaces can scarcely be affected by a sinapism. Who can determine the nature of these idiosyncrasies, or foretell them? None.

Symptoms. These differ in different individuals. In a few instances, the disease commences with constitutional symptoms, of the typhoid kind, and the local affection does not show itself for two or three days. But, in the majority of cases, the local precedes the constitutional affection—being sometimes confined to the limb, but at others, proceeding rapidly to the trunk, and terminating fatally.

"In a few of the cases induced by venesection, the lancet-wound seems to heal as readily as usual. In some it remains permanently united, but in others it opens again, or at least, the wound of the skin gives vent to the discharge of some purulent matter. More commonly, union does not take place. The lips of the incision remain swollen, a little red, and everted. Some ichorous or purulent discharge appears, and the local disease extends continuously from the wound." 593.

In the most alarming variety, the affection follows the usual progress of inoculated diseases. First, a pustule or vesicle takes place at the part where the poison is applied—then there is high constitutional disturbance, corresponding to the eruptive fever of the exanthemata, followed by severe diffuse inflammation in some parts of the cellular tissue, rapidly extending in all directions, but not continuous with the primary local pustule, which often gives little uneasiness, and generally heals very quickly. In what way the affection is propagated from the local injury on the fingers to the part which is the principal seat of the secondary disease, is very doubtful. There is no evidence that it is exclusively by phlogosis of the veins or absorbent vessels, as some have maintained. When the disease proceeds from inoculation, the constitutional symptoms generally occur in the course of one or two days from the accident.

Secondary Inflammation. This is generally in the axilla, when the cause is applied to the hand or arm. Thence it extends towards the sternum, up along the neck, or downwards along the side. In most cases, it is confined to one side; but sometimes it passes the mesial line, and invades the opposite side of the body. In other cases, again, it is translated from one side to the other, not by any regular spreading of the inflammation, but by metastasis, as we see in gout, rheumatism, and erysipelas.

"When the swelling reaches the axilla, whether it advance to it progressively from a lancet-wound in venesection, or appears at

once after dissection, it is always of a very peculiar and characteristic nature. It is diffuse and extensive, without the slightest tendency to point, being only flatly elevated above the neighbouring sound parts, and its limits are rarely defined by a margin, which, however, is sometimes raised. It is smooth and equal, having no central hardness, no *focus* where it is more active. If the glands can be felt enlarged, it is only in a slight degree; and, in general, no cords which can be supposed to proceed from enlarged or thickened lymphatics, veins, or other vessels, can be traced under the surface. But it is the general feeling and sensation which the swollen part gives to the touch which characterises it, and which depends upon the effusion of fluid generally into the cells of the cellular membrane. It is tense, but soft in a greater or less degree, and when pressed by the finger, does not pit, but gives a sensation between the resisting hardness of phlegmon, the yielding softness of œdema, and the elasticity of emphysema. The epithet of *boggy*, applied to it by Mr. Lizars, appears to me exceedingly expressive of its nature. Like a quagmire, it conveys the idea of a firm surface, with a spongy, unsound bottom, loaded with fluid." 598.

This obscure sense of fluctuation has led many, and among others, Dr. D. himself, to make deep punctures, with the view of giving vent to a supposed collection of fluid, when there was nothing to be discharged.

The *pain*, in almost every instance, is represented as exquisite, and often precedes any redness of the part. In some cases, the secondary inflammation runs its course, terminating in extensive suppuration, without any redness of the skin being perceptible—"and in all true cases of this disease, the cutaneous inflammation is secondary, and the result of the progress of the disease from the cellular tissue to the skin." Thus, in the hospital nurses, there was no affection of the skin, although the existence of most extensive cellular suppuration and gangrene was positively ascertained in one of them by dissection.* Vesicles or bullæ very seldom appeared till the disease was far advanced; nor has Dr. Duncan observed the vesicular-like tubercles which were seen in the case of Mr. Hutchinson, and the late Professor Dease; but all his observation confirm, in the strongest manner, Dr. Colles's observations on the slight connexion between it and the affection of the skin, and the total difference of the disease from erysipelas.

* In an epidemic of this kind, which once raged among the crew of the Royal Oak, in Basque roads, and where several cases proved fatal, we have seen the whole cellular substance of the thigh, for instance, so completely destroyed (without any thing visible on the surface) that when the integuments were slit up, the whole would fall off, leaving the muscles underneath as clean as if they had been dissected by an expert anatomist. The men that died, all exhibited symptoms of typhoid fever. *Rev.*

There is something remarkable, also, in respect to the temperature of the parts. It is often below par. This is particularly remarked by Mr. O'Halloran, where the swelling is represented as œdematous, cold, and insensible. Sir. E. Home was also struck with the coldness of a man's arm bit by a rattle-snake. Such a degree has not been observed by Dr. D. but it may be explicable by the sudden effusion which takes place into the cellular tissue, diminishing the connexion of the skin with the sources of animal heat.

"*Fever.* In most instances, the affection was accompanied with excessive constitutional irritation, and a very high degree of fever, which well deserved the appellation of typhoid, from the extreme muscular debility and depression of mind which accompanied it. Indeed, on some occasions, it was scarcely possible to determine, whether it was a case of this disease, or of typhus fever with peculiar local symptoms.

"The symptoms and progress of the fever presented considerable varieties. It sometimes commenced insidiously, sometimes tumultuously, but, in most of the severe cases, soon reached its height. The chief peculiarities I observed were the supine posture with depressed shoulders, in which the patient almost always lay, without turning to either side, the absence of coma, and the rare occurrence of continued delirium." 603.

Some of Dr. D's patients emitted a peculiar cadaverous smell during life—and, in one case, a fetid and coloured sweat proved critical.

"My notice was strongly attracted by the morbid state of the respiration in several of these cases; and, in fact, there are two very sufficient reasons for it; one of which almost always occurs, and both not unfrequently. When we consider that the inflammation, with extreme tenderness most commonly affects the *pectoralis major* and *minor*, *serratus anticus*, and other muscles connected with the ribs, we may be satisfied that their motion must give uneasiness and pain: but when the intercostals themselves are involved in the disease, their action becomes more distressing. The pain in these cases resembles that in an exquisite degree of pleurodyne." 603.

In some cases, however, the pain is not solely muscular; the inflammation extends to the pleura, and produces actual pleuritis.

Terminations. In the very slight cases only, when arising from an injury, does diffuse inflammation of cellular tissue, terminate in resolution. If our author, however, is right in considering acute anasarca and phlegmatia dolens as examples of this disease, we have resolution a very frequent termination in such cases. The next most fortunate issue is abscess; in

which case, the effusion of coagulable lymph seems to arrest the extension of the inflammation, by producing accretion and obliteration of the cells, and concentrating, as it were, the inflammatory action within a limited space, converting the diffuse and spreading, into the fixed and circumscribed phlogosis. This termination is not unfrequent, after venesection, when abscesses form near the edge of the biceps muscle, or in the fore-arm. Diffuse and extensive suppuration is a more common termination in severe cases, and is observed both in those which recover, and in those who die.

"When the recovery after suppuration and sloughing is complete, the cellular membrane seems to be regenerated; and this is the more probable, as we see it every day formed in these preternatural adhesions which take place between serous surfaces, and in what are called new or false membranes.

"In some cases, however, nature seems to be inadequate to the reproduction, or rather the state of the neighbouring parts necessary for the reproduction has been permanently affected; and we find adhesion of the skin to the subjacent muscles, or deeper seated adhesions remaining, giving rise to permanent contraction of the limbs, or rigidity of the muscles. In many instances, these gradually disappear, in a great degree, but in others they are more or less permanent. This seems especially to be the case, when the diffuse inflammation of the cellular tissue is complicated with that of the skin." 606.

When this inflammation extends to the cellular tissue forming the attached surface of serous membranes, as the pleura, &c. the whole serous membrane soon becomes affected, and gives rise to corresponding phenomena. Transition to the mucous membranes has not been so distinctly observed in this disease; yet, in one case, that of Mr. Blyth, an aphthous inflammation was very troublesome during convalescence. Even the osseous system does not always escape the ravages of this formidable disease. Our author found, in one case, the ends of several of the ribs carious, and denuded of periosteum. In other instances, there was reason to believe, that the periosteum was included in the disease. The period of fatal termination varies, from two or three days to as many, or more, weeks.

Post-mortem Appearances. Dr. Duncan gives a methodical *resumée* of the appearances on dissection; but, as we have quoted very freely the dissections themselves, in their proper places, we shall be excused resuming the subject, with the exception of a single quotation:

"As this disease is progressive, affecting one part first, and then

others in succession, we find it after death existing in different parts, in all its stages. Accordingly, in the part most recently affected, which was often the space between the twelfth rib and the os ilium, we find the cellular substance merely œdematous, with increased vascularity; the serum is still fluid, and limpid, or tinged with red, and readily flows from the divided tissue. In a more advanced stage, the effused matter is less fluid, often higher coloured, and has not yet acquired the opacity and whiteness of purulent matter. We next find the cellular membrane gorged with a white semi-fluid matter, which does not flow from the incision, but greatly augments its thickness, and separates the particles of fat to an unusual distance from each other. In the subsequent stage, it continues opaque, whitish, or reddish, or greenish, but becomes more fluid, so that now purulent matter flows from the incision. But the pus is still contained in the cells of the tissue; and it is only in the last stage of the disease, and after the tissue is entirely broken down, that we meet with collections of purulent fluid, with sloughy membrane; even then, however, the pus is not contained in a cyst or circumscribed cavity, but is gradually lost in cellular substance in the preceding stage of the change, without any line of demarcation.

"When fluid pus is formed, I have already spoken of it as if it were broken down cellular substance; but it is perhaps rather a secretion, which is in such abundance as to rupture the cells, and break down the cellular membrane, so that the portions thus disjoined from their necessary attachments become dead, or in common language, sphacelous. In this way we may account for the masses, like skeins of thread, drawn out of Mr. Blyth's side; and the sloughs of cellular membrane, described by Sir E. Home as resembling wet tow, and by Mr. James as looking like large wads of wet shamoy leather." 610.

Diagnosis. When we consider how extensively the cellular tissue enters into the composition of all our organs, it is difficult even to imagine a case perfectly free from complication. Still we do not think that any observant practitioner will confound phlegmonous with diffuse inflammation—and still less this last disease with erysipelas or inflammation of the skin. From phlebitis, it will be generally distinguished by the cord-like feel of the vein, and the tenderness on pressure being confined to the track of the vessel. In some cases of phlebitis, however, there is considerable difficulty in distinguishing the two diseases, nor will any verbal discriminations be likely to assist us.

Prophylaxis. As some people are much more than others obnoxious to the bad consequences of dissection-wounds, they ought to wear gloves in their *post-mortem* investigations, where no great dexterity with the knife is at all necessary. It is a proper precaution, Dr. Duncan thinks, to anoint the hands

well with camphorated oil or simple lard, before handling the viscera. The precaution of examining the hands to see if there be any abraded surface, before dissection, is too often neglected—though it is a very necessary one.

Local Treatment. The indications are three—to remove the poison before it has time to operate on the system—to render it effete—or enable the system to resist its impression. For attaining the first object, Dr. D. observes that, "nothing is more effectual than instantly sucking the wound with the utmost force, by which means the poison is often removed, and no fear need be entertained of any bad effects upon the mouth which receives it." This we grant, provided there be no abraded surface in the mouth itself—a thing not very unusual. Celsus recommends a cupping-glass to be applied—but this can seldom be done, as, for instance, when the finger is wounded. The next, in point of simplicity, is careful ablution on the part by hot or cold water—or both in succession. The destruction of the poison, or rather of the parts to which it is applied, is often attempted by chemical agents, as nitrate of silver, the mineral acids, or caustic potash. With some of these the dissector should be provided. "But of all the means of destroying the properties of the poison, none is equal to the actual cautery or excision, when practicable."

For enabling the system to repel the poison, powerful stimuli to the part have been recommended. Dr. Colles directs that the anatomist should plunge his finger into a cup-full of *ol. terebinth.* the moment it is wounded, in the hope that the irritation may counteract the power of infection, or alter the mode of inflammation in the wound. This practice is often employed by country-people to punctures from pins or needles to prevent festering. Dr. Duncan seems to entertain a favourable opinion of ligatures above the wound, with the view of preventing the absorption, or of setting a limit to the extension of the disease, when once excited. "The judicious application of a ligature by Mr. Burton, in his own case, seems to have set a limit to the extension of the disease towards the trunk, and was probably the means of saving his life."

When the poison once acts upon the system, the effects are of two kinds—local and constitutional. for each of which appropriate remedies are to be sought. With the view of reducing the local inflammation, Dr. Duncan has found the continual application of a considerable degree of cold eminently beneficial, so long as no phlegmon had formed—for, after that period, cold seemed prejudicial, and warm fomentations useful.

The patient's own feelings will always be an index on these occasions. Local bleeding by leeches, or scarifications from the part are never to be neglected, in the first instance, with the object of setting up a counter-irritation on the surface, and diverting the inflammatory action from the internal and more important tissues. It is upon this principle also, that the action of blisters is frequently of service in the early stages—although, at a later period, their salutary action may be explained by the large discharge of serum which they produce. It is upon the same principle that the application of the actual cautery may prove serviceable. This was put in practice, and with good effect, by Morand. In none of the cases which came under our author's notice did the leech-bites show the least tendency to fester or become gangrenous.

"As soon as any fluid seems to be effused into the cellular tissue, which in the severe cases is very soon, I am covinced that the best practice is to give it immediate vent by free incisions. When, deceived by the sensation of deep-seated fluctuation, we content ourselves with plunging in a lancet into the part, we are disappointed by no discharge taking place; still the puncture sometimes proves of essential service, by facilitating the discharge, as soon as the effused matter becomes sufficiently fluid to flow out. Thus, the deep puncture made in Mr. Blyth's side appears to have been the eventual means of saving his life.

"But a much bolder practice is preferable, and one which was long ago recommended by Mr. O'Halloran, on the sure ground of experience. He gives an account of the treatment of three cases, in all of which the disease followed venesection. In the first case the arm was scarified lightly in several places, but the patient died on the 9th day. The second case was seen by Mr. O'Halloran on the 5th day after, and again on the 8th. He now resolved to make "many profound incisions the length of the arm, in hopes that the activity of the stupes and poultices would sooner pervade these parts." Wherever he made his incisions he found the adipose texture swelled and spongy, so much, that at the depth of an inch he did not cut through it, showing that little danger accompanies profound incisions in such a state. Water, clear as crystal, started from the wounds, and was increased by pressing on the contiguous parts. His first incisions were made near the bend of the arm, and round it, in nearly parallel lines, each above an inch long, and about half an inch distant. In about two hours he made a similar range of profound incisions, about two inches higher up the arm, and next day a third and fourth set; the swelling of the arm returning between each. At night the arm was visibly lessened, and on renewing one of the incisions over the biceps muscle, about a table-spoonful of pus, of a pale whiteness, spouted out of the orifice, and, for the first time, the patient sensibly felt the heat of the stupes, and the activity of the dressings, which, he observed, produced a tingling heat all over the arm. Next day more profound

incisions were made, and on opening the sores at night, those of the arm which before seemed so deep and extended, now appeared small and superficial, on account of the subsiding of the swelling of the skin and *corpus adiposum*. After this he speedily recovered his health, and the use of his arm and fore-arm. The dressings applied were of the most stimulating nature, and he got a liberal allowance of wine and generous diet." 641.

The treatment by deep scarifications, employed by Mr. A. Copland Hutchinson and others in erysipelas phlegmonodes (which is neither more nor less than the disease now under consideration), is strongly in favour of that just recommended by our author, and put in practice long ago by Mr. O'Halloran.

Constitutional Treatment. The principles of the general treatment in this dangerous disease are very far from being settled, as the following brief sketch of the various plans tried or suggested by different writers, will testify.

Celsus prescribes early stimulation—as wine and spices. Dionis combines stimulation and depletion. He says, we must bleed plentifully from the opposite arm, and administer cordials internally. Mr. O'Halloran bled his first patient, gave him an active warm purge, and afterwards exhibited the bark in substance, with strong broths; but the patient died. His second patient was also bled, had a warm purge—then strong port-whey, claret, and strong seasoned broth. He recovered. The third patient had an irritable stomach. She was purged smartly by two grains of calomel, and next day took the decoction of bark with sulphuric acid, which the stomach constantly rejected. She survived, but was paralytic. In conclusion, Mr. O'Halloran states that, although he made use of blood-letting in his first two cases, yet, upon mature consideration, he condemns it, "as rather weakening nature than assisting us," except upon very urgent occasions. He recommends warm purges, seasoned broths, wine, and jellies, &c. Mr. Abernethy scarcely notices the general treatment; nor is Mr. Travers more particular. His patients, however, seem to have been bled and purged. Dr. Colles found large doses of opium ineffectual in relieving pain; nor did the usual remedies make any impression on the fever with which Mr. Hutchinson was affected. In the more advanced stage his strength was supported only by large quantities of wine. Professor Dease was bled, purged, had laudanum, ammonia, wine-negus, and cordials—but in vain. It is almost needless to say, that all the specifics which have been extolled against the bites of poisonous animals, are of the stimulating or

cordial kind. We now come to Dr. Duncan's own sentiments respecting the constitutional treatment.

"The cases which have fallen under my own observation, have been treated almost entirely antiphlogistically, and in the greater number the lancet has been repeatedly employed. Both from the relief, which has often been immediately given, as well as from the indisputably inflammatory nature of the disease, there remains no doubt in my mind as to its propriety in most cases; and although it has failed in many, this must be ascribed to the intensity of the disease, which no depletion, consistent with the continuance of life, is able to overcome. Thus Mr. Cumming was bled no less than four times, besides the repeated application of leeches—but in vain: and the case recorded by Dr. Le Herissé, shows that very copious abstraction of blood is unable to prevent or mitigate the disease in every instance; for the patient was bled on account of epilepsy, on the 1st November, twice from the arm; on the 8th from the foot; on the 10th and 13th from the jugular; and on the 16th from the arm, and this puncture was the cause of the disease: to cure the disease, on the 18th the temporal artery was opened, and blood freely abstracted, but he died on the 23d.

"The blood drawn has in general been remarkably sizy, some describing it as covered with a yellow crust, and others comparing it to calves-foot jelly. This appearance is owing to a very complete separation of the fibrine and red globules, while at the same time the fibrine does not contract and express the serum, as it does in what we call cupped blood.

"Thus we see, that, in the treatment of this disease, very opposite means have been employed, and both appear to have been occasionally successful, and both have failed. But their salutary effects depend upon different principles. In general, by the antiphlogistic treatment, we are enabled so to lessen the existing inflammatory state, that the system is capable of recruiting and performing the office of restoration to health; but, on the other hand, by the free exhibition of diffusible stimuli, we seem, in some instances, to impart to the system such a degree of preternatural energy, as to resist and extinguish the diseased action; after which health is again restored by gradually abstracting the cause of the artificial and salutary excitement. In some cases, however, we are perplexed by opposite indications, when an extreme degree of debility requiring cordials, exists along with intense inflammation, which can be conquered only by further depletion. In these cases we must have recourse to the alternate, or even simultaneous, employment of the most opposite remedies." 648.

This is probably as judicious advice as can be given. From what we have seen of this dangerous disease, we confess that our opinion of depletion has not been greatly raised, but on the contrary, we much doubt its propriety, excepting in its local application. The tumult occasioned in the system by the introduction of a poison, is not like that of an inflam-

matory fever, dependent on strong inflammation of an internal organ, nor is it likely to be subdued by antiphlogistic remedies alone. We quite agree with Dr. Duncan, however, that depletion and stimulation are by no means to be always considered as antagonising remedies. In many cases, it may be advantageous to diminish the quantity of circulating fluid, and excite the living solid to greater action, at the same time. We shall conclude this paper with the following passage, which also concludes the Essay.

"Hitherto I have considered the debility we have to combat, as the effect of preceding excitement exhausting the powers of life; but, in the very worst cases, no symptom of excitement precèdes the appearance of extreme debility, which may thus be considered as primary. It may be said, that in such cases, the cause, whatever it may be, has operated on the constitution as a direct sedative, reducing its powers, and rendering them incapable of re-action. But this explanation is equally inconsistent with facts; for if the patient survive a certain length of time, this state of debility and depression is succeeded by a very high, but peculiar, state of excitement, producing in its turn true exhaustion, and often irrecoverable debility. In fact, the state of excitement in every inflammatory disease is preceded by a state of depression. This is universally acknowledged, and, *post horrorem*, forms a part of every definition of febrile diseases, but still the importance of the cold fit has not been sufficiently appreciated, except in the case of ague. It must, however, be admitted, that in the pure *phlegmasiæ*, the cold stage is short and transient, and the hot stage long and durable. Hence our treatment is chiefly, or almost solely, adapted to the state of excitement. But it appears to me that the malignant form of all inflammations, such as occurs in some instances of diffuse cellular inflammation, commences with an intense and long-continued cold stage, in which the patient may be carried off before re-action is established.

"According to this view of the disease, we should treat those malignant cases, which begin with the symptoms of extreme debility, on the same principles that malignant intermittents are treated during their dangerous cold stage; that is, we should administer diffusible stimuli freely until the commencement of reaction, when the antiphlogistic treatment should be vigorously enforced." 650.

We need make no apology to our readers for the length of this analysis. The importance of the subject, the obscurity of its pathology, the difficulty of treatment, and the ability of the author—all demanded a wider circulation for the Essay than it could ever hope to attain in the original volume of Transactions where it is published. We have, therefore, endeavoured to condense all its important features within a reasonable compass, and hope it may excite a greater attention to the subject than has yet been paid to it.

V.

A Translation of the Pharmacopœia of the Royal College of Physicians of London, 1824, *with Notes and Illustrations*. By RICHARD PHILLIPS, F.R.S. L. et E. &c., Lecturer on Chemistry, &c. Octavo, pp. 326, price 8s. 6d. boards. London, 1824.

OF *this* work, or of *this* translation of the work, it is not necessary to say any thing. The Pharmacopœia is now well known, and the translator's ability to perform this task is unquestionable. The notes and illustrations are all that we have any thing to do with. After what happened on a former occasion, the chemical and pharmaceutical world was in expectation of a tart critique from Mr. Phillips. But TIME seems to have rubbed off his critical asperities, and done what LETTERS are said to do.

"Emollit móres, nec sinit esse feros."

Perhaps the work is not the less useful in consequence of this milder tone in its composition. Mr. Phillips's views in the accompanying notes, have been chiefly directed to what he conceived to be the wants of the medical student—"with the intention of offering him a concise explanation of the chemical changes which occur during the preparation of medicines—of the qualities which indicate their perfection—and of the means by which he may detect the adulterations to which they are subjected." But, although our author's attention has been principally bestowed on the *learner*, yet he flatters himself "that some of his experimental researches may prove not totally devoid of interest even to those who may long have been practitioners in medicine." He here alludes more particularly to the preparations of iron, especially to the nature and quantity of oxide which they contain, both when prepared according to the College, and as usually met with in the shops. He trusts his analyses and observations will be useful in causing greater uniformity in the preparations, and in guiding the practitioner to the selection of those which merit the greatest reliance. By the aid of diagrams, our author has facilitated the comprehension of those changes which take place in the compositions and decompositions of medicinal substances. He has also paid some attention to what he considers a curious and interesting, though much neglected, department of science—"the crystalline forms of salts." Not being a medical practitioner himself, he has

drawn what is said of the powers and doses of medicines from the best sources—especially Dr. Paris's Pharmacologia and Mr. Thomson's Dispensatory.

Having thus portrayed the objects and intentions of our author, it only remains for us to exhibit some specimens of the execution, taken without much selection from the notes.

Example 1. ANTIMONIUM TARTARIZATUM. After describing the process for preparing this important medicine, as directed by the College, and commending the improvement introduced into the present Pharmacopœia, our author goes on to remark thus:—

"The crystals of this salt are colourless and inodorous, but have a styptic metallic taste: on exposure to the air, they effloresce slightly, and become opaque. When heated with carbonaceous matter, this salt is decomposed, and metallic antimony is obtained. It is soluble in about fifteen times its weight of water at 60°, and twice its weight at 212°. The aqueous solution decomposes spontaneously after it has been some time prepared. It is insoluble in alkohol.

"*Composition.*—This is a double salt, or a compound of tartrate of potash and tartrate of antimony; but I am not satisfied with the results of any analysis hitherto given—that which is generally quoted, is obviously incorrect.

"*Adulteration.*—This salt should never be purchased in powder, but always in crystals: in the former state it frequently contains a portion of supertartrate of potash uncombined with any oxide, and which, in preparing the liquor antimonii tartarizati, is precipitated. To judge if the crystals have been properly prepared, drop one or two into a solution of sulphuretted hydrogen gas, and an orange-coloured deposite will be formed on them.

"*Incompatibles.*—The solution of this salt is decomposed by acids, by alkalies and their carbonates, by some of the earths and metals, and their oxides, by lime-water, muriate of lime, and the acetates of lead. Many vegetable infusions, and especially those which are bitter and astringent, decompose it, such as cinchona, rhubarb, catechu, &c." 83.

Speaking of the vinum antimonii tart. as prepared with dilute spirit, instead of wine, he observes, that "when tartarized antimony has been carelessly prepared, and contains supertartrate of potash uncombined with oxide of antimony, it is precipitated from solution in water by spirit: those practitioners, therefore, who purchase tartarized antimony, should insist on having it in the state of crystals, in which there is little chance of the occurrence of this imperfection."

On analysing specimens of PULVIS ANTIMONIALIS, procured from two respectable sources, he found one to consist of 35 parts of peroxide of antimony and 65 of phosphate of lime.

The other specimen showed 38 parts of the peroxide to 62 of the phosphate. Mr. Phillips also analysed James's powder, and found it to consist of nearly the same ingredients and proportions. He concludes, that both forms are perfectly inert. In this we do not agree with our author, simply because we have seen, times innumerable, sickness and vomiting produced by both preparations.

Ex. 2. Ferri Subcarbonas.

"*Composition and Qualities.*—This preparation is usually of a deep red colour; and it consists generally of about

Carbonate of iron - - - - - - -	4
Peroxide of iron - - - - - - -	96
	100

"I have procured this preparation from several respectable sources, but have never found it to contain five per cent. of carbonate of iron: the reason of this is, that unless it be washed with hot water, and then speedily dried, the protoxide of iron absorbs oxygen, and being converted into peroxide, it is no longer capable of remaining combined with carbonic acid; for a solid percarbonate of iron cannot be formed, though it may probably exist in solution.

"When preparing this compound with the greatest care, I have found it to contain about 15 per cent. of carbonic acid, which indicates its composition to be

Carbonate of iron - - - - - - -	40
Peroxide of iron - - - - - - -	60
	100

"From the great affinity which exists between iron and oxygen, and from the rapidity with which the protoxide absorbs it, so as to form peroxide, it seems to be impossible to procure a perfect carbonate or subcarbonate of iron.

"Ferri subcarbonas, when it has been carefully made, has a reddish-brown colour; it dissolves readily in acids with effervescence, and yields 15 per cent. of carbonic acid during solution. When improperly prepared, it contains only about 1.5 per cent. of carbonic acid, its colour is less brown, and it is not so easily dissolved by acids.

"When this preparation contains a large proportion of carbonic acid, it is much more readily soluble, and its activity as a medicine is probably proportional to the quantity of that acid present.

"*Incompatibles.*—Acids and acidulous salts, which dissolve it with effervescence." 98.

We have only room for one more example, and that from the same metal—iron.

Ex. 3. *Tinct. Ferri Muriatis.*

"*Process.*—The muriatic acid decomposes the carbonate of iron, expelling the carbonic acid gas with effervescence, dissolving the protoxide of iron with which it was combined, and also the peroxide of iron. I find that the proportions here directed answer extremely well, for less than one scruple of the subcarbonate of iron remains undissolved, including the accidental impurity which it may contain.

"When this tincture is made with subcarbonate of iron, containing 15 per cent. of carbonic acid, it is a mixed solution of protomuriate and permuriate of iron in spirit; and its preparation from carbonate of iron is attended with this inconvenience, that the protoxide of iron becomes peroxide by absorbing oxygen, and part of it is precipitated, which renders the tincture liable to diminish and vary in strength.

"As tinctura ferri muriatis is esteemed to be one of the most active of all the preparations of iron, I have paid particular attention to the preparation of it, and have procured it from several respectable sources for the purpose of examining the proportion of iron which it contains.

"The specific gravity of four different samples, and the proportions of peroxide of iron obtained from half a fluid ounce of each, were as follows:—

No. 1,	sp. gr. 1·030	Peroxide of iron 20·	grains.
2,	0·975	11·3	
3,	0·951	9·3	
4,	1·003	12·1	

"Finding these great variations in the specific gravities, and the quantities of oxide contained in these samples, I prepared some of the tincture precisely according to the directions of the College, and found its sp. gr. and the peroxide of iron yielded by half a fluid ounce, were as follows:—

Specific gravity 0·994 Peroxide of iron 16·8 grains.

"It is difficult to account for the excess of iron in the sample No. 1; but the deficiency of the remainder is readily explained, by supposing that the muriatic acid employed was too weak to dissolve the assigned portion of the subcarbonate.

"*Qualities and Composition.*—This tincture is of a reddish-brown colour, its taste is extremely styptic, and its odour resembles that of muriatic ether. When prepared, as it usually is, from peroxide of iron nearly unmixed and carbonate, it is almost entirely permuriate of iron, and each fluid drachm contains nearly 4·2 grains of peroxide of iron.

"*Incompatibles.*—Alkalies and their carbonates, lime-water, carbonate of lime, magnesia and its carbonate. It is rendered black by astringent vegetable bodies, and is decomposed by a solution of gum arabic." 100.

Upon the whole, we consider our author's notes and illustrations as very valuable additions to the Pharmacopœia, with very trifling increase of price.

VI.

A Treatise on Mental Derangement, containing the substance of the Gulstonian Lectures, for May 1822. By FRANCIS WILLIS, M.D. Fellow of the Royal College of Physicians. Octavo, pp. 234, London, 1823.

WE conceive that Dr. Willis was hardly prudent in styling this work a *Treatise* on mental derangement. The term *Essay* would have been more appropriate, and more in consonance with the substance of a Gulstonian lecture. The work is divided into seven chapters, in the first of which our author seems to have set up a man of straw for a serious combatant. Who, in the present state of our knowledge, denies the connexion between mind and body, and their mutual influences on each other? None, we believe. But, says our author, the disease under consideration has been looked upon by some as merely and exclusively a *mental* malady, curable, without the aid of medicine, by what are termed moral remedies—such as travelling, and various kinds of amusement. And so we believe it often is; for granting that it is a corporeal disease—that is, a disordered function of the brain, as the material organ of thought, may not moral remedies act, and very powerfully too, on this same organ of thought? If moral emotions can produce insanity, may not contrary emotions tend to cure it? This indeed is admitted and pointed out by Dr. Willis himself. We agree with him, that it is to the nervous system we are to look for the seat of insanity. Any deviation from a state of health in the nerves, must occasion a derangement in the transmission of sensations to the sensorium, and, consequently, inaccuracy of perception there.

"My endeavour in the preceding observations, is not to point out what constitutes a MIND, for that is wholly out of our reach; but to show that the nerves are the medium of communication between the mind and the body, that the mind varies from alterations taking place in them, that mental derangement should be considered for the most part as primarily a disease of the body, particularly of the nerves; and that the cure ought to be attempted by means principally acting upon the body." 36.

It is quite unnecessary to follow our author's arguments in support of the above positions, which have long been acknowledged and acted upon by all intelligent physicians in this country and on the continent.

The second chapter of the work is entitled "*a Description*

of the HIGH STATE ;" which certainly is not a very scientific, though it may be an expressive term to apply to a particular condition of mental derangement.

There are two states then of this malady, both of which may, "in their progress, pass into delirium, and again subside into derangement, and both, by neglect and improper treatment, may end in insanity;—so that derangement, delirium, and insanity, are to be regarded as different degrees of mental disorder." We confess that this passage does not brighten our ideas on the subject of insanity. Perhaps, however, it is proper that the language should be suited to the subject.

"One state of derangement is characterised by an unrestrained behaviour, by an irritability which urges on the patient in pursuit of something real or imaginary to the ruin of himself, and the annoyance of his friends, and ultimately leads him, if opposed in his disordered wishes, to acts of extreme violence.

"The other state is marked by an unusual lowness, sometimes amounting to despair, a loathing of life, and every thing connected with it, accompanied too often by an uncontrollable effort to rescue himself, by his own hand, from his real or imaginary distresses." 41.

These distinctions, in general, are sufficiently discernible; but each case varies with the constitution—some partaking so much of both states, being neither high nor low, that a person unused to see such might be easily deceived, and even think the patients well. In the high state, our author thinks the whole nervous system is the seat of the disorder—in the low state, "the stomach and other viscera seem to be more especially affected." The distinction between delirium, mental derangement, and insanity, has been so ably drawn (our author thinks) by his late relative (Dr. R. D. Willis) in his examination before the House of Commons, in the year 1810, that he cannot improve upon it. It runs thus:—

'In *delirium*, the mind is actively employed upon past impressions, upon objects and former scenes, which rapidly pass in succession before the mind, resembling in that case, a person talking in his sleep; there is also a considerable disturbance in the general constitution, great restlessness, great want of sleep, and a total unconsciousness of surrounding objects. In *insanity*, there may be little or no disturbance apparently in the general constitution, the mind is occupied upon some fixed assumed idea, to the truth of which it will pertinaciously adhere, in opposition to the plainest evidence of its falsity; and the individual is always acting upon that false impression. In insanity, also, the mind is awake to objects which are present. Taking insanity, therefore, and delirium, as two points, I would place *derangement of mind* somewhere between them.' 44.

In the above passage we can perceive a distinction between delirium and insanity, as two opposite points; but we affirm, that there is no distinction laid down between either of them, and that "no man's land," which the doctor has placed "somewhere between them." Neither does the younger Willis at all, in our apprehension, elucidate the definition of his relative, by his own commentary.

"It will be evident from this definition, that delirium is distinct from insanity, neither can there be any difficulty in distinguishing delirium from mental derangement; because an unconsciousness of surrounding objects, together with much mental and *bodily disturbance*, are the characteristic symptoms of the former. But the greatest caution is sometimes necessary in distinguishing mental derangement from insanity. The *characteristic* symptoms of insanity are a firm *belief in an assumed idea*, upon which the patient is always acting, without any apparent bodily disease. In mental derangement there is also *a firm belief in an assumed idea*, upon which the patient is continually acting, but with this difference, that it is always accompanied with bodily disease. This amounts, sometimes, almost to as much as attends delirium; at other times it is apparently so trifling as scarcely to be discovered, even by those who are conversant with the disorder." 45.

If the author had any clear ideas of his own in writing the above passage, he has failed in communicating them to us. This, however, may be from want of proper apprehension on our part. Our author next proceeds to describe the "advancement and progress" (which, by the by, must be pretty nearly synonymous in this case) of the high state of mental derangement. This description he prefers giving from Dr. Monro rather than from his own observations.

"'High spirits, as they are generally termed, are the first symptoms of this kind of disorder; these excite a man to take a larger quantity of wine than usual; for those who have fallen under my observation in this particular, have naturally been very sober, and the person thus afflicted, from being abstemious, reserved, and modest, shall become quite the contrary, drink freely, talk wildly, obscenely, swear, sit up till midnight, sleep little, rise suddenly from bed, go out a hunting, return again immediately, set all his servants to work, and employ five times the number that is necessary; in short, every thing he does or says, betrays the most violent agitation of mind, which it is not in his own power to correct; and yet, in the midst of all this hurry, he will not misplace one word, or give the least reason for any one to suppose he imagines things to exist, that really do not, or that they appear to him different from what they do to other people. They who see him but seldom, admire his vivacity, are pleased with his sallies of wit, and the sagacity of his remarks, nay, his own family are, with

difficulty, persuaded to take proper care of him, until it becomes absolutely necessary from the apparent ruin of his health and fortune.' " 48.

It is evident that the above picture was copied from the acts of a man of property, whose establishment was large, and who was fond of field sports. Each individual presents peculiarities according to his habits and employments prior to the mental aberration. The literary man would be occupied with his books, the tradesman with his accounts, the soldier with his arms and evolutions, &c. All their actions and expressions, however, would be characterised by an unusual hurry and bustle, indicative of the excitement going on in the sensorium.

These symptoms are only prelusive of others much worse. Conversation becomes irksome—relations appear unkind in their behaviour—those most loved become objects of aversion —in short, the unfortunate man takes up a firm belief in an assumed or visionary idea, which may frequently be traced to something that had engaged his attention in the early period of his illness.

" To constitute derangement of mind, his aberrations must be attended with bodily indisposition. If the latter be not apparent, the chance of cure is hereby diminished; the case then partaking more of insanity than derangement. If, on the other hand, the symptoms of bodily indisposition increase, delirium ensues; and then the patient 'begins to rave, and talk wildly and incoherently; swears, as if in the most violent rage; and then immediately after, bursts out into fits of laughter; talks obscenely, directs offensive and contemptuous language against his relations, and those around him; spits at them; destroys every thing that comes in his way; emits loud and discordant screams, and continues in this way till he is quite exhausted. The state of rest which follows, is generally short and sleepless; the patient is obstinate, will not speak one word; clenches his teeth if any thing is offered to him to swallow; or else, with a degree of cunning, he pretends to drink a little, but immediately squirts it out again on the person who offered it. At once, however, he again breaks out into all the wild and extravagant language and actions he committed before. If kept in strict coercion, he has often so much command over himself as to behave mildly and modestly; and were it not for the general expression of his countenance, and the peculiar glistening appearance and rapid movement of his eyes, he might impose on many of the by-standers, and make them imagine that the state of phrenzy was over.' "*

These symptoms vary much, according to the idiosyncrasy of the patient. In some, the irritation never rises to delirium.

* Vide vol. I. p. 160. An Enquiry into the Nature and Origin of Mental Derangement, by Alexander Crichton, M.D.

When it does, the length of the paroxysm is various—from a few minutes to 24 or 48 hours, during which the patient will talk incessantly, till apparently worn out and exhausted. After a short repose, he will begin again, more violently than ever—especially if sleep should have recruited the body.

Such are the *mental* phenomena. The *corporeal* are next to be examined. Irritability and constant motion of the body, are the first singularities that strike the observer. As the irritability increases, the patient becomes unruly, and mischievous—breaking or destroying every thing that comes in his way. The countenance appears mottled—the eyes exhibit a singular wildness, often amounting to the terrific.—The pulse varies, but is generally quick—the tongue is white and tremulous. Thirst is not usually complained of, but salivation not unfrequently takes place The temperature also varies, but the head is often very hot, whilst the feet, hands, and fingers are cold as marble. The patient appears to experience great distress in the præcordia—the respiration is hurried—the breath hot and offensive. He will eat voraciously, and indiscriminately. The internal senses are affected, as well as the sensorial functions. The stomach will not act by emetics, nor the bowels by purgatives. A blister produces little pain—and heat or cold is not much attended to by the patient. "In short, (as Dr. Willis properly observes,) every organ will be found more or less disordered, and the natural sense throughout the frame perverted." 60. No one will deny that here there is evidence of corporeal disease. In short, no man who is not insane himself, will argue for *purely mental* disease. In every case of insanity, the organ, through which the mind is made manifest, is deranged in function—and it is in this way only, that the phenomena of insanity become known to us.

The 3d chapter of the work before us, is on the remote and proximate causes of insanity. Dr. Willis very properly objects to Dr. O'Halloran's distinction between mania from a moral, and mania from a physical cause. The two may be identical as to pathology. Moral causes, as we said before, may produce lesions of function or structure in the brain, and thus lead to insanity. The same lesions of function or structure may be the result of physical causes—as inebriety, for example—and still the mental aberration will be the same. We agree, therefore, with Dr. Willis in the following passage.

"I cannot but differ widely from Dr. Halloran in his practical distinction; for, whether the disorder is produced by causes that immediately affect the mind, as disappointed ambition, and loss of fortune, or those that act primarily on the body, (such as excess in

drinking, and other sensual desires) the disorder, when produced, is identically the same, owing its origin to disease of the body, which is to be cured by means more immediately applied to, and acting upon, the body. It does not follow that every man who loses his fortune, or meets with disappointment, is to become deranged; but, if either of these circumstances operate so powerfully upon the mind as to cause sleepless nights, for any length of time together, the body necessarily suffers for want of its natural rest, and the health is hereby as much disordered, as it would be after spending many nights in continued intoxication. In both these examples, the sufferers are rendered incapable of attending to business; they alike become confused, restless, and irritable, and liable to be deranged, which refreshing sleep, in both cases, at an early period, might prevent. An attempt to cure such, however, by remedies which act solely on the mind, would be altogether vain. Were we to shut a deranged man up in a room, allow him no exercise, give him no medicine, and thus make no use of bodily applications, but of arguments and mere mental amusements, we should clearly leave the more effectual remedies untried." 66.

Dr. Willis has somewhat unguardedly, we think, filled several pages with quotations and illustrations from Shakspeare's King Lear, to show that, although the mind may be primarily affected, the body suffers previous to any mental derangement. The poet's illustrations are all very natural and correct, but they are not calculated for a pathological discussion, as Dr. Willis, we are sure, will allow, on sober reflection.

In respect to the proximate cause, or exact condition of the body, during insanity, there is great difference of opinion. Dr. Cullen supposes it to depend upon a peculiar state of the nervous system—Crichton, on a specific diseased action of those fine vessels that secrete the nervous fluid of the brain—Hill, to the same effect—Cox, Arnold, Mayo, place insanity to the account of a determination of blood to the brain, or an increased activity in its vessels—while Esquirol avers, that it is not necessarily connected with any one particular disease of structure—but that merely the function of the sensorium is disordered, and that from a variety of causes, moral and physical.

Our author considers the structural lesions, discoverable on dissection, as the consequences rather than the causes of insanity—and in this he is supported by most of the best pathologists of the present day. He considers Cullen's opinion (above quoted) as coming as near the truth as that of any of the modern writers on the disease.

Dr. Willis next examines the principal remedies that have been recommended in insanity, beginning with blood-letting. Dr. W. is a great enemy to this measure, and quotes, in his support, much Greek from the ancients, and, as usual, some

poetry from Shakspeare. But what is rather more to the purpose, he refers to the success of his relative (Dr. Willis) as a proof that venesection is rarely necessary or proper, even in the high state of insanity described above.

"Although we suppose the brain to be more especially concerned in all the mental operations, it is to the region of the diaphragm that we still refer all painful and pleasurable sensations of the mind; it is in this region that the agony of grief, the pangs of disappointment, and the excess of joy, are so sensibly felt. Nothing, indeed, can operate strongly on the mind without, in some degree, disturbing the regularity of the functions of the viscera in this region; hence, in palpitation, syncope, sighing, sobbing, and convulsive laughter, which are all natural consequences of mental emotion, the heart, lungs, and diaphragm are more or less concerned.

"This did not escape Shakspeare, in his beautiful delineation of Lear's disorder; who, previous to his derangement, thus complains,—

"*Lear.* Oh, how this mother swells up toward my heart!
'*Hysterica passio!*
'Oh me! my heart! my rising heart!"

"Whether, then, we look upon the disordered functions of the thoracic viscera as symptoms of bodily disease, or consider the extraordinary quickness of the imagination, the wild association of ideas, and the unnatural volubility of language which occur in this complaint, as marks of mental disturbance, what term, I would ask, could be found more appropriate to designate this disease, than the one adopted by the ancients (phrenitis) which comprises the acute disorder both of the body and mind?

"Dissection has certainly disclosed that turgescence of the vessels of the brain, and thickening of its membranes, take place in this complaint; hence, the effect has been confounded with the cause, and hence, phrenitis and inflammation of the brain have become synonymous terms; but would it not be very remarkable, if the brain, the most delicate and essential organ in the body, exhibited no marks of disease, after the constitution had suffered such agitation and disturbance as I have heretofore described." 113.

In respect to the treatment, then, of the high state before described, our author remarks that, in general, the more violent the delirium, the more is death to be apprehended from exhaustion. We see, says he, the irritability of a man in his sound senses allayed by means which tend to procure rest, and give support to the system. "How much more necessary is it, then, that these same means should be prescribed when that irritability is greatly increased, and liable every moment to destroy life." We will allow our author to give a practical illustration of his doctrine.

"The patient was a young lady, of a naturally irritable consti-

tution; who, having been in a very nervous state for many months, was, from domestic occurrences, thrown into a most violent delirium; on the sixth day from the attack of which she was placed under my care. With short intervals of cessation, she had been continually raving for four successive days and nights; labouring, at the same time, under such irritability, that four persons had been employed to watch and prevent her from getting out of her bed. While in this state, and previously to her becoming my patient, leeches had been applied to her forehead and temples, cupping-glasses to the back of her neck, and a blister to her head; purgatives, also, were given; barley-water with weak broth had been the only sustenance allowed. Her state, as I found it, was this: she had ceased to rave, probably from exhaustion, having been wholly without sleep; she had become obstinately silent, but was still in perpetual motion; her pulse was 130, her whole skin very hot, and completely parched; her face flushed and bloated; her eyes suffused with blood, and wide open; yet she could discern nothing; she was also unconscious of her evacuations; her tongue was brown, her lips and teeth covered with sordes. In attempting to feed her with a spoon, she clenched her teeth; if we succeeded in putting any thing into her mouth, she spit it out, after keeping it there a moment; so that it was impossible to administer any medicine without using force. Had the lady died in this state, and dissection been desired, a turgescence of the vessels of the brain, water effused into its ventricles, or some other deviation from the healthy state, would probably have appeared. Her death might then have been attributed to one or more of these circumstances.

"Viewing this case differently, and considering that she had been incessantly raving, till from exhaustion, she could rave no longer; that she had not closed her eyes for five successive days and nights; that weak broth had been the only sustenance allowed her—I inferred, that although there might be some disease in the brain, either congestion of blood, or effusion of serum, the patient was necessarily nearly worn out, and her life in danger.

"Under this impression, therefore, I immediately ordered her two glasses of old port wine, and two hours afterwards, three ounces of a decoction of bark with some of the tincture, as the only means of saving her life. In four hours, from my first seeing her, she was in a sound sleep, but only for a short time. Upon her awaking, the same quantity of decoction of bark was again given, when she slept three hours together. On the following morning, her life was comparatively safe; although she was still unconscious where she was, and took no notice of persons in the room; she no longer clenched her teeth or spit; but, when breakfast was offered to her, she put the cup naturally to her mouth; and after obtaining more sleep from a continuance of these remedies, she was able to answer questions correctly; in short, her irritability began to subside, and her sense of feeling to return, in some degree, from the moment they were first applied." 121.

Notwithstanding the fortunate issue of the above case, we should be loth to exhibit bark and port wine often, where the

skin was parched—the eyes suffused with blood—the tongue brown, and the patient delirious.

In mental derangement, unaccompanied by delirium, the *irritability* may be very great, yet no immediate danger may be at hand. Here, also, our author recommends the stimulating plan. "Wine, bark, and musk, therefore, with the addition of henbane, hemlock, *tartar emetic, and foxglove* (curious auxiliaries to bark and wine!) may all, or each of them, be given."

Our author asks, is it not a mistake to suppose "that a quick pulse and a flushed countenance necessarily preclude the use of tonics and stimuli?" To this question we would answer, "*yes, in general.*" And to Dr. Willis's next assertion that—these symptoms (quick pulse and flushed countenance) appear *more frequently* than otherwise to be the consequences of debility," we would answer—"No, in general." We would ask whether the symptoms above mentioned, as "more frequently" appertaining to debility, be not two of the most usual concomitants on inflammation of all the great internal organs—on pneumonia, carditis, cephalitis, peritonitis, &c.? How then can we lay down such a dangerous principle for the guidance of the young and inexperienced, as that these symptoms are to be generally looked upon as indicative of debility, and consequently forbidding every kind of depletion. Be it remembered that the above observations of Dr. Willis do not refer purely to insanity—but are general expressions—and he offers the following *very appropriate* illustration. "If a person, by shipwreck or other accident, be deprived of sustenance for many days together, shall we continue that deprivation because we find a quickened pulse and a flushed face follow the reception of very small quantities of food into his stomach?" We wonder how Dr. W. could think of offering such an extravagant instance as an illustration. How many examples are there on record, where the application of heat after severe cold, and the introduction of food after long fasting, have quickly extinguished the remains of vitality in the part or whole of the system? Nothing can be more illustrative of the *caution* necessary in applying stimulation, than the example brought forward by Dr. Willis, as an exemplification of its utility. In extracting the following passage on practical points, we could not help remarking the *probabilities* so often introduced by our author.

"Although hemlock and henbane be valuable in allaying irritability, they are nevertheless dangerous, if administered without due caution; whilst one dose will moderately soothe, another of greater quantity will stupify. In some cases, irritation is even increased by very small doses, whilst the constitution is under the first and immediate influence of them.

"Tartar emetic, another valuable remedy, in irritable cases, requires also to be cautiously administered. Where a patient shall be in no danger, but incessantly talking, a quarter of a grain of tartar emetic, by nauseating, may restrain him: but if this medicine were injudiciously continued every hour for any space of time, he would *probably* become more irritable than ever, and weaker; while his voice and actions would deceive, and suggest the idea that he was stronger, at the very time he might be approaching to a state of danger. The same result would, in all *probability*, follow the use of antimony in any form, of digitalis, or of the spiritus mindereri, if given too often, and in too large doses, without due attention to their effects.

"I purposely omit to mention opium, because, as it confines the bowels, and frequently produces watchfulness, I do not think it a desirable narcotic in this disorder." 126.

In concluding the subject of bleeding, Dr. Willis observes, "that it cannot be expected we shall ever be enabled to discover, by a view of the dead, however minute and close the inspection, *any thing whereby to assist us* in the cure of the disorders of the mind." Now, as Dr. Willis maintains, and we think justly so, that insanity results from *corporeal disease;* with what consistency does he maintain that *post mortem* researches can never assist us in acquiring a knowledge of that *corporeal* disease? Is this the case in other diseases of the material fabric?—We maintain, then, that the prosecution of pathological investigations is as necessary in insanity as in any other disorder; and that although we have not yet been able to ascertain that "*peculiar state of the nervous system,*" which Drs. Cullen and Willis conceive to be, *probably*, the proximate cause of insanity, we are not to be deterred from the pursuit by our hitherto want of success.

The Mental Disorder. After persisting in our efforts to restore the corporeal health perfectly, we must endeavour, says Dr. Willis, to restore the mind also. "Sound and refreshing sleep, he considers as the greatest desideratum, both in cure of the body and the mind." "We should, therefore, endeavour to procure a continuance of it for many nights together." Having by this means, in some measure, restored the tone of the nerves, it should be our next care to divert the mind of the patient from this morbid association of ideas, and direct his attention to other points. Narcotics are to be employed to procure sleep, and bodily exercise for the purpose of producing a pleasant degree of fatigue.

"As to the second, (the diversion of the mind,) we know that a man of sound mind, when absorbed in thought, or deeply engaged in business, is insensible to what is passing in his presence: we

can hardly hope, then, by the introduction of friends, the exhibition of pictures, the representation of plays, or similar amusements, to make any useful impression upon one of unsound mind: but since we have seen the former capable of being roused by any thing that suddenly alarms his mind, or irritates his body, it is reasonable to infer that any shock which the latter shall receive, be it from what cause it may, will produce in a degree a similar effect, that may in his state prove of use to him. What then is likely to be better calculated for the purpose than an emetic? It not only cleases the stomach of much viscid matter, and thus assists in restoring the general health, but by the nausea it creates, and the disturbance it occasions, rouses the patient, and dissipates his thoughts. Moreover, by its action upon the whole frame, it excites perspiration, produces fatigue, promotes sleep, thereby conducing to the restoration of the tone of the nervous system, and to a probable return of that state, which is requisite for the steady and healthy operation of the intellectual faculties." 136.

The testimonies of Monro, Cox, Hill, and others, towards the utility of emetics, are brought forward by our author, and there is no doubt or question of their occasional efficacy in this disease, notwithstanding the contrary opinions of Halloran and Haslam. Blisters, at a distance from the head, are strongly recommended by Dr. Willis. After citing opinions for and against this practice, Dr. Willis quotes a passage from the favourite author of the late Dr. Gregory of Edinburgh—Gaubius.

"Gaubius has evinced, in his treatise on these complaints, a greater knowledge of the method of treatment in the cure of them than any other physician, ancient or modern. His remarks apply so closely to this part of my subject, that I shall offer no apology for quoting him at some length. 'If experience teaches us,' says he, 'as I have shown above, that the mind perceives differently according to the various conditions of the body to which it is joined, and that she may be disturbed by the body in her operations, and at some times be hindered from thinking as she would, and at other times be compelled to think according as the body commands; doubtless a physician making a proper use of the power which their intimate alliance affords him, can by his medicines so act on the body as to give relief to the mind, though he pay no regard at all to the causes or effects, which are in, or are feared to be in the body.

"'He hath such things at hand which his art furnisheth him with, that can compose the mind though ever so violently agitated—that can divert her from thinking upon what she is ever so closely bent upon—that can oblige her to keep holiday, by erasing for a while all her ideas, and introducing a kind of general oblivion. An opiate, by laying the body fast asleep, can perform all these things.

"'The physician hath auxiliaries at his command, which may recall the mind again, when she hath ceased to think; or, at

least, after she hath lost all consciousness of thought, which can interrupt her too attentive and close reflection; finally, which can dissipate ideas that have been too long present, and substitute others in their room. Such is the power and virtue of those remedies which stir the humours, irritate the nerves, or give pain.'" 144.

After this, Dr. Willis introduces several judicious observations, some of which we shall notice. There are particular symptoms of recovery that are often misinterpreted by the inexperienced practitioner, such as pain in the head, and a general aching and soreness, complained of after remedies have been applied for some time. These are rather proofs of a return of natural feeling than of the impropriety of the remedies that have been used. Relapses are always to be expected; but, in favourable cases, an increase of amendment may be rationally expected after each relapse, till the cure is effected. Daily improvement, however, is not to be looked for. We must draw our conclusions from the occurrences of a week or a fortnight. "The pulse will not fall from 130 to 70, as rapidly as in other complaints: it may continue about 100 for some weeks, without causing any alarm, provided the patient be supported. As irritation subsides, the pulse gradually diminishes." p. 149. If a patient, after being perpetually restless, can sit quiet in his chair for half an hour, we may judge favourably of him, though his delusions be equally strong as before. When he remains composed for whole days together, proving thereby a great subsidence of nervous irritation, we may look for a return of reason. This takes place very gradually. As the bodily health improves, and the nerves recover their tone, the mind gains strength also. The patient begins to feel his situation, to reflect upon his delusions, to doubt as to their truth or fallacy; and, after supposing that he may possibly be in error, he ultimately becomes so satisfied of the absurdity of his ideas, that he wonders how he could ever have believed them to be true. No man, Dr. W. thinks, can be considered as cured—that is, of sane mind, "until he freely and voluntarily confesses his delusions." This can only apply to mono-mania, or a delusion on a single topic. Many become insane, without any fixed point of hallucination, and who, on recovery, cannot tell what they may have said or done previously.

Upon the moral management of the insane, Dr. Willis makes several judicious, though not very novel remarks. Separation from friends and home is the first step; and the next is, to bring the froward and untractable patient under discipline. This must be mild or rigid, according to the disposition and previous habits of the insane. Speaking of the *waistcoat*, Dr. W. very properly observes as follows:—

"Some think that soothing measures alone would answer the end: these, therefore, reprobate the use of the *waistcoat* as needlessly severe, which, if more experienced and better informed, I am confident they would be induced to commend, as the kindest and most benevolent mode that can be adopted. Imagine, for instance, a person in a high state of delirium, running about almost naked, turning over every thing near him, threatening to kill any one who dares to touch him, at the same time loud and frightful in his voice and so totally lost as to be quite insensible to any thing said to him. Can words alone soothe and soften in such a case? Can they have any effect, during his present state, in preventing him from either being starved to death in his nakedness, or from wearing himself out by his violence and want of rest? How shall quiet, so requisite and essential, be obtained for him in this state? Surely the only way is by restraining and subduing him. Without such control, too, how are we to administer his food and medicine, or how prevent him from injuring himself or others?" 162.

The straight-waistcoat is not only required for the purposes above described—it is salutary in itself. It alarms the mind—leads to reflection—subdues the spirit—and produces rest. "In fact, (says Dr. W.) so great are the benefits arising from this mode of restraint, that it would argue more than weakness, and little less than inhumanity, not to enforce it when manifestly required." Dr. Willis illustrates the efficacy of a straight-waistcoat and tonic treatment by the following case:

"A gentleman, who had been out of health for some time, being rendered anxious by business, gradually lost his natural rest, and becoming incoherent in his language and conduct, I was requested to visit him. I found him in great agitation, incapable of sitting still, passing from room to room, holding conversations with persons whom he imagined to be present. Amongst other things, he fancied that a group of people were dancing under the grate, insects crawling upon his clothes, and animals playing upon the carpet. Improbable as he acknowledged this to be, still the more he looked, the more he was convinced of the fact. His pulse was 90, skin hot, face and eyes suffused with blood, pupils dilated, and upper eyelids much elevated. I learnt that his bowels had been acted upon by medicine, and that he had been without sleep for three nights. A proper person having been procured to attend upon him, a draught composed of decoction of bark and camphor mixture was ordered to be given every three hours. He grew more irritable, passed a very unquiet night, and in the morning showed a disposition to be violent, threatening to jump out of the window, unless permitted to leave his room. The waistcoat being put on, he was confined in bed. His involuntary and uncontrollable efforts were thus checked, and he fell asleep for four hours: at the moment of awaking he was very clamorous, but, on continuing the medicine, went to sleep again, had a very good night, and awoke calm and collected, observing he had been under

strange delusions. He was advised to remain in bed, to take two grains of calomel, and continue the medicine three times that day. On the following morning, having passed a second good night, his pulse was 68, skin cool, countenance natural, and his language and conduct so perfectly consistent, that my attendance became unnecessary. He nevertheless, by his own desire, took the medicine for a few days longer, and remains quite well." 166.

We have extracted the above case, as exhibiting a mode of practice almost the reverse of that generally pursued. Most of our modern doctors initiated in the mysteries of insanity, would have employed a very different plan in the above case; and we leave it to be settled by them, as to the eligibility of the tonic treatment here recommended. We attach the more importance to Dr. Willis's statements, as his opinions are pretty evidently founded on the experience of his grandfather, of well-known celebrity in this line.

Dr. W. remarks, that the establishment of a cure will greatly depend upon the period that has elapsed between the commencement of the disorder and the application for advice.

"The prognosis of a patient's return to reason, is the more favourable where bodily disease is most conspicuous. His life, however, may for this reason be in greater danger. Still, provided skilful means are early administered, and the patient survives, the recovery of the mind is almost as certain to follow that of the body, as night follows day. But if, by improper treatment in the first instance, the cure of the bodily disease is prevented from taking place within a reasonable time, a fixed state of insanity is often an inevitable consequence. Again—should the health of body improve, and the mind in the mean time evince no signs of amendment, the prognosis of its restoration becomes less favourable, and the case then approaches nearer to insanity, thereby lessening the hope of a cure." 168.

In this place Dr. Willis enters into a defence of his grandfather's evidence before the House of Commons, against some strictures put forth by Dr. Haslam. It appears that Dr. Willis had stated, "that of patients placed under his care within three months after the attack of the disease, nine out of ten had recovered." Upon this statement Dr. Haslam comments thus:—"He should have been more satisfied as to the *truth* of that assertion, had it been plausibly made out; but he required some other evidence than the *bare assertion of the man pretending to have performed such cures.*" *Haslam*, p. 251.

This is severe—indeed, illiberal language—and such as we unfortunately too often meet with in the discussions carried on between gentlemen who pursue *particular branches* of the profession. It would almost seem that, in many cases at least,

liberality of sentiment is narrowed in proportion as a medical man confines himself to an exclusive branch of the healing art.

Dr. W. quotes a passage from the work of Mr. Hill of Chester, reflecting on Dr. Haslam's criticism, and corroborating the statement of the elder Willis respecting the successful treatment. The younger Willis also avers that the passage from his grandfather's answers only applied to the *high* state of insanity, or "*delirium and derangement cum febre*," under which the king then laboured.

Low State.—This, Dr. W. remarks, is characterised by an unusual lowness, sometimes amounting to despair, and frequently accompanied with the desire of suicide.

"The symptoms which precede derangement in the Low, are very different from those of the HIGH state. In the place of hurry and unusual violence, we find great apathy, and profound listlessness. A patient in the former state, instead of enjoying the company of his friends, delighting in his accustomed amusements, and following his ordinary occupations, shuns society and seeks solitude; he prefers his bed to any other place; neglects his dress, disregards his food, and is averse to exercise: he is even unwilling to move from his seat; but if he does, it is with a slow step: he will sit for hours together without seeming to be capable of motion. He seldom speaks; and if spoken to, he does not answer till the question has been put to him two or three times: he is, in short, totally lost and regardless of every thing, except the subject upon which his mind appears to be wholly employed.

"A pallid and fixed countenance, dull eye, scantiness of secretions, loss of appetite, languid circulation, long and deep inspiration or sighing, all accompany this inactivity of mind. The patient now obtains very little sleep, yet, owing to the general torpidity of his constitution, he is with difficulty roused. Disturbed and restless nights succeed, more or less attended with fever and debility. After a continuance of this state, perpetual watchings, confusion of ideas, and derangement, may ensue without any other apparent symptoms. Very often, however, indigestion is the primary affection." 185.

Unless the preceding symptoms are attended to, the fever increases—the patient's countenance betrays alarm and anxiety—he grows suspicious of his dearest friends—is surrounded with imaginary horrors, and dreads to be left a moment alone. At length the delusion becomes fixed—his mind is impressed with some false idea—his life appears irksome, and death desirable.

The same remote causes which occasion the high state, may also occasion this; "but why such different states should arise from similar excitements, it may be difficult to determine."

"The remote causes may, as in the high state, be considered under two heads, according as they primarily affect the body or the mind.

"Under the first division, we may include whatever by immediate application offends or injures the stomach and other abdominal viscera, creating indigestion, the effects of which are strongly exemplified in the subsequent case.

"A young lady, after eating some heavy paste, had been attacked with a sensation of burning heat at the pit of the stomach, which increased till the whole of the upper part of her body, both externally and internally, appeared to her to be in flames. She rose up suddenly, left the dinner table, and ran out into the street, where she was immediately followed, and brought back. She soon came to herself, and thus described her horrible ideas—that she had been very wicked, and was dragged into the flames of hell. She continued in a precarious situation for some time. Whenever she experienced the burning sensation of which she first complained, the same dreadful thoughts recurred to her mind She seized hold of whatever was nearest, to prevent her from being forced away; and such was her alarm, that she dreaded to be alone. This lady had been long distressed by family concerns, and harassed by restless and disturbed nights, which had greatly injured her health.

"Persons addicted to drinking spirits, especially in hot climates, frequently become dyspeptic, and are sometimes the subjects of the Low state, which may likewise be the consequence of hypochondriasis and hysteria.

"Under the second head of exciting causes, we may consider whatever operates so powerfully upon the mind as to paralyse, as it were, the whole frame, and in particular the viscera of the abdomen. Amongst such may be mentioned great anxiety of mind, severe disappointment, loss of reputation and property, long-continued attention to any important concern, and accidentally killing a near relation or friend." 195.

A case of sudden delirium, terminating in suicide, is brought forward by our author from his favourite sepulchretum—the works of Shakspeare.

Many of the remedies recommended in the high state are proper in the low. Dr. Willis considers sleep as the first thing to be procured; and next a proper state of the digestive organs. We must be careful to distinguish the restlessness which is a consequence of nervous irritation, from that which is an effect of disordered bowels. In the latter case, bark would increase the malady, by lying heavy in the first passages. Emetics and purgatives are therefore proper at the beginning, "which should be followed by medicines that tend to restore the tone of the stomach and other abdominal viscera, such as mild alteratives, tonics, and cordials."

The prognosis in this state is less favourable than in the high, because the attack is commonly more insidious, and much time is suffered to elapse before advice is sought. "It

is remarkable," says Dr. Willis, "that patients who fancy they are poisoned or suffering internally, are less likely to recover than those who imagine themselves ruined in fortune, or disgraced by crimes." Dr. Willis traces this low state to the *lethargus* of the ancients, as he does the high state to the *phrenitis* of the same people. We do not think it is worth while to enter into this learned dissertation, which leads to no practical purpose in the end.

Between these two extremes, the high and the low state, there are various intermediate shades, which cannot be described, and which must be left to the discrimination of the practitioner. We shall conclude with the following very judicious piece of advice from the pen of the celebrated Monro.

"'The only cautions necessary for those unacquainted with 'this complaint, are, not to be too hasty in their evacuations, nor 'to carry them beyond the strength and constitution of the patient; 'never to lose a proper authority over him, which they will al-'ways find necessary for his management; not to be imposed 'upon by his cunning artifices; nor to give him up too soon as an 'incurable. As to medicines, there can be no particular direc-'tions; all that are proper in other distempers, will be found of 'use in this when applied with judgment.'" 210.

We have thus presented the leading features, facts, and opinions contained in Dr. Willis's lecture. And although we cannot go so far as our author in recommendation of the tonic treatment in mania, yet we have seen enough to convince us that a very common error is committed in amalgamating the excitement of mania with the delirium of inflamed brain, and treating it with active depletion on that principle. Practitioners will find, sometimes when it is too late, that maniacal patients, however violent their symptoms, will not bear depletion like patients labouring under inflammation of the brain or its membranes.

VII.

A Treatise on Moxa, as applicable more especially to Stiff Joints: illustrated by Cases and Plates: with some general Observations on Spinal Disease. By James Boyle, Esq. Surgeon to the Middlesex Infirmary—Author of a Treatise on the Epidemic Cholera of India, &c. Octavo, pp. 168, two plates. London, January, 1825. Price 7*s.* in boards.

This little work is dedicated in respectful language to Dr. William Burnett, Commissioner for the Medical Department of the Navy, and then opens with some introductory observations on the application of *caloric*, as a powerful agent in the treatment of chronic diseases. Mr. Boyle avers, that our continental brethren, while they have given abundant proofs of the practical advantages of heat, mechanically applied to the human body, have left entirely unexplored the *physiological* action of this powerful material. But we cannot stop at the physiological threshold of the work. The treatise on Moxa is very short, as far as the history of this remedial agent is concerned—and it was wisely made succinct, as Dr. Dunglison's translation of Barron Larrey's memoir on the subject, supersedes the necessity of any lengthened detail. It will appear from the following quotation, that Mr. Boyle's method of applying the moxa differs from that employed on the Continent.

"In this country *moxa* is known by little more than name—a name too, which, from the impression it conveys, is not likely to recommend it to general notice. Such indeed is the severity with which the operation is performed on the continent, where the remedy is in common use, that the objections held against it in England, both by practitioner and patient, are not much a matter of surprise. The circumstance of deliberately and slowly burning a part till an eschar is formed, must ever bear the semblance of rudeness and barbarity, whatever may be the result of the process. This, however, is not the only objection, another of far greater consequence exists, namely, that *moxa*, when applied to the extent and rapidity of a cautery, is not capable of effecting the same or equally important purposes which a gradual or slow process has the power of doing. This idea was conceived from a physiological consideration of the action of heat on the human body at various temperatures, and gave rise to a modification of practice, in which the author feels borne out by the result of the following extraordinary cases, which, as they offered resistance to every other chirurgical agent, except the one now under discussion, will perhaps be considered the best proof in favour of the remedy, and of the mode of applying it hereafter to be explained." 21.

We shall now proceed to give an account of some of the cases recorded in this volume.

Case 1. This was an Officer in His Majesty's service, who, while serving in India, experienced a severe attack of acute rheumatism in the right knee.

"On his arrival in England, his general health had suffered serious deterioration; the muscles of the leg and thigh were much wasted, and the knee was still enormously swollen. It was supposed, that the local affection depended upon a generally deranged state of his health, and that by improving the latter, the former would subside of itself; so physicians of eminence were consulted, till at length good health was re-established; but without effecting the slightest improvement in the local disorder. The case being now altogther surgical, he had the advice of those men, who in reputation justly stand at the head of the profession: each pursued his particular plan of practice, and each in turn pronounced the case one not to be cured. In addition to all the common, and more probable means of success, *Mahommed*, of Brighton's, shampooing and medicated baths were tried. In this way two years were passed; the chances of recovery being naturally diminished in proportion to the duration of the complaint: last of all, he was advised to relinquish every idea of public service—an advice which distressed him the more, as he was possessed of singular zeal and a laudable ambition to rise in his profession. Such were the outlines of this gentleman's case, and such were his prospects of recovery!

"When consulted, I found the knee to be greatly enlarged, painful, and hot to the touch; the enlargement being the more conspicuous, in consequence of great wasting both above and below the joint. There was scarcely any action of the leg upon the thigh, and the patella had no apparent motion, being bound down, I supposed, by thickening and condensation of the cellular membrane with which it was surrounded. On each side of the ligamentum patellæ, immediately under the inferior margin of the patella, a hard mass of substance, about the size of a finger, and having a cartilaginous feel, greatly contributed to the fixed state of that bone; limiting the sphere of its natural action, and rendering its motion impossible. It was believed that a thickening of the ligaments, but particularly of the capsular, existed; and from the great degree of heat, as well as much sensitiveness, it was concluded that deep-seated inflammation was still going forward. With this impression, twenty-four leeches were applied, and the bleeding kept up by hot fomentations. On the second day following, the heat of the part being still above the natural standard, twenty more leeches were had recourse to; the fomentations were again used, and on this occasion a large bread poultice was placed round the knee. After this, evaporating lotions were persisted in, till the temperature of the affected part was reduced to par. Fearing now a sudden reflux of blood to the numerous enlarged vessels

surrounding the knee, small doses of digitalis were administered: this appeared to answer the purpose effectually, so the application of *moxa* next became the remedy for consideration.

"A small quantity of the *Chinese moxa* having been procured, about the size of a hazel nut, compressed between a pair of common dressing forceps, was lighted and held as near the part as could well be borne, till it entirely burned away; and this was repeated three or four times on each occasion of its application, which at first was three times a week, varying a little, the part over which it was placed at each repetition. To effect motion of the patella being an object of great importance, attention was more particularly directed to that. In general, therefore, the circumference of the patella was divided into four portions, which were considered the most favourable for the action of the material under consideration.

"After this apparent ordeal, which, in truth, was by no means painful, the knee was rubbed for fifteen minutes with camphorated oil; a flannel bandage was then passed with moderate tightness, for the purpose of keeping up whatever new action in the absorbents and veins the *moxa* might have induced. Finally, manual efforts were used to extend the limb; supposing that much of the stiffness depended upon a rigidly contracted state of the fibres of flexor muscles. In a few days it was satisfactory to observe the advantages of this system; for although the improvement was, at first, so slow as to be scarcely perceptible to the eye, we had assured ourselves of its reality, by applying a scale in the ham, and marking it up to the point gained. The circumference of the knee was soon reduced; but the thickening of the cellular substance in the neighbourhood of the inferior portion of the patella was so indolent, that caustic issues were deemed advisable: this, however, did little except interfere with the more successful course, which had been previously commenced, and was consequently discontinued. Having expended all the foreign *moxa*, which could be procured in London, recourse was had to the expedient of substituting a piece of folded calico, which, being lighted, was kept burning by means of a pair of bellows, after the manner in which this remedy is usually applied in the Parisian hospitals; but this being objectionable, on account of the intense heat which it caused, as well as a most acrid and offensive smoke, a composition resembling the Chinese *moxa*, was obtained from Paris: this secured the preference, and being easily imitated, a similar preparation was continued."* 29.

Attention was directed to every part of the knee in which pain was felt, until the joint had acquired nearly as much

"* This preparation is made by dissolving one ounce of nitrate of potass in a quart of water, and therein saturating a quantity of fine cotton wadding, which being dried and formed into small parcels, is enclosed within paper cylinders, about half-an-inch in diameter, and one inch in height. It burns in an extremely slow and gentle manner; and only requires being kept dry, to be fit for use at all times. I do not know any substance so well calculated to fulfil the purpose for which this is employed."

freedom as in the natural state. By this time the muscles of the leg and thigh had filled out—flexion and extension were almost complete—"in fact, the parts surrounding the knee presented nearly their proportionate form and pliability:—finally, walking, dancing, riding, and the hot baths of Brighton, were practised as a wind up to the cure." This gentleman is now employed in the public service of his country, and enjoys perfect health.

We have given the above case more at length than we are accustomed, because it shows what may be done by perseverance in manual and external measures, in cases of stiffened and otherwise diseased joints.

Case 2. This was a lady who had had acute rheumatism also, affecting more particularly the right wrist, which was stiffened, the muscles weakened, and pronation and supination entirely prevented. Moxas were applied on the muscles of pronation and suppination, and shampooing diligently employed, with frictions of camphorated oil. "In the course of three days an amendment was perceptible, and at the expiration of fifteen days, the powers of the arm were almost perfect."

We can only make room for one more case, which was that of a lady of high rank, and where we have reason to believe, the success was very striking, and the advantage to the author not inconsiderable.

Case 3. "A lady of high rank had an arm lame for eight years—the following are the outlines which were given:—

"After *accouchement*, a train of symptoms and circumstances, the description of which would be superfluous here, preceded and gave rise to violent inflammation of the arm; the back of the hand, the wrist, and the internal part of the arm, near the elbow suffered more particularly.

"On examination, I found the hand to be bent inwards, upon the forearm, forming an arc of about an inch and a half in depth. And, on passing the fingers along the forearm, in the direction of the *flexor sublimis perforatus*, the centre of that muscle was found to be much contracted, having formed several distinct indurated projections; at its origin, there was a mass of contracted muscle. The elbow joint was perfect, but that of the wrist admitted not of the slightest perceptible motion. All the fingers of this hand were more or less stiff; the middle finger was completely so, and was frequently a cause of great annoyance, by striking against hard bodies, such as doors, tables, chairs, parts of the carriage in getting into it, &c. &c. The power of extending the fingers one from another was greatly limited. From these circumstances, her harp,

which was formerly to this lady, a source of the greatest delight, had stood quite idle during the long period of the above misfortune; the *piano*, which was less difficult, though less a favourite than its companion, became a substitute in consequence; and was surprisingly executed upon by the increased powers which practice gave to the left hand. From the advantages of wealth and liberality, this case had not suffered for want of numerous medical opinions, and the full trial of varied means of cure in this country, as well as on the Continent, where, finally, it was given over as a hopeless case, and had not since that period, a space of six years, undergone any treatment.

"The practice commenced by applying daily three or four *moxa* cylinders at regular distances, in the direction of the *flexor sublimis perforatus*, followed by friction with camphorated oil, and also mechanical extension. In the short period of a week, motion was perceptible at the wrist, and the masses of thickened fibres from this time began to disperse. Much friction and shampooing were now had recourse to, as well as the application of the moxa to all the joints of the fingers and the whole course of the above described muscle. After conducting the practice in this manner for some weeks, cork splints, neatly padded and covered, were brought forward as an additional auxiliary. The other processes having been gone through, they were applied daily, and allowed to remain on for the space of half an hour. These splints had the peculiar advantages of accommodating themselves, in some measure, to the resisting force of the muscles opposed to them; and being secured by straps, easily admitted of an increase or diminution of the extending power. In this manner the flexor muscles were soon greatly relaxed, and the fingers acquired a proportionate degree of suppleness. The action of the wrist, however, was still beyond the control of the muscles; a certain degree of force being yet necessary to effect the motion which had been thus acquired." 38.

It was now supposed that ossific union between the articulating extremities of the ulna and radius and the carpal bones had taken place; hence further attempts to *cure* this joint were laid aside, and undivided attention was directed to the fingers, and those muscles under whose more immediate influence they are, in the healthy state. Moxa was applied to the respective joints of the fingers, followed by friction and shampooing—which system was persevered in for five months, at the end of which time, "every finger had regained its long-lost pliability—the arm had restored to it again almost all its former symmetry, and this lady had the gratification of being able, once more, to resume her former favourite amusement in music." 39.

For many other cases, we must refer to the volume itself.

The work concludes with some general but judicious observations on spinal diseases. But as we have occupied an unusual portion of our journal lately with this subject, we cannot enter on it in this place.

Respecting the powers of moxa, we can say nothing from personal observation; but we have seen so much good result from friction and shampooing, that we have little doubt that moxa, in conjunction with these means, may become very successful, in skilful hands. Mr. Boyle is deserving of thanks for laying the result of his experience before the public, without reserve, or the least attempt to conceal any part of the process employed by him on different occasions.

VIII.

1. *A Compendium of Theoretical and Practical Medicine; comprising, with the Symptoms, Diagnosis, Prognosis, and Treatment of Diseases, a General Review of Physiology and Pathology, together with an Estimate of the present State of Medical Science.* By DAVID UWINS, M. D. Licentiate of the Royal College of Physicians in London, and late President of the London Medical Society, &c. Small octavo, pp. 386. London, January, 1825. Longman & Co.

2. *A Nosological Practice of Physic, embracing Physiology.* By GEORGE PEARSON DAWSON, M. D. Octavo, pp. 380. London. 1824.

DR. UWINS seems to anticipate a very natural question on the appearance of a new compendium, namely:—

"With the volumes of Good and Gregory, Temple and Thomas, in the hands of our students, what can be wished for more? and if a compendium be required, is it not furnished by the Vade Mecum of Dr. Hooper?" *Preface.*

When people ask themselves questions, they seldom find much difficulty in answering them. After eulogizing the volumes above mentioned; all and each of which are pronounced to be excellent in their way, a hiatus is discovered, and a field for industry and genius proclaimed.

"But still a *compendious combination of pathology with practice;* of doctrine with fact; of present-day science with former information, has long appeared to me a decided desideratum in medical literature. Under this impression, the items composing the present tract have been put together; and, under this impression, the tract itself is, at length, after many unlooked for delays, respectfully presented to the medical student." viii.

By the author of the second work on the above list, we are informed that the production now offered to the public is the result of twenty-eight years dedicated to the study and practice of medicine.

"The object which the author had in contemplation was to exhibit general views of the principles and treatment of diseases, interspersed with classical, physiological, and pathological facts and observations. Dissatisfied with existing nosologies, he has constructed one for himself, which is simple, intelligible, and consentaneous with his own experience." *Advertisement.*

The plan and execution of these two works differ materially, one from the other. Dr. Dawson is always fixed in his opinions, positive in his assertions, and somewhat dogmatical in his didactics—Dr. Uwins is constantly trimming (we mean in the first part of his work, "*General Physiology and Pathology*") between opposing doctrines—and, like the Philosopher in Rasselas, always concludes without any thing being concluded. The language of Dr. Dawson is always good—often elegant. That of Dr. Uwins is the most tortuous, rugged, and *designedly* uncouth, which we remember to have seen in any modern author. We say *designedly;* for no man ever took such pains to disguise himself and distress the ears of his readers, as Dr. Uwins. We tell him this plain and uncourtly truth, because we respect him, and are sorry to see him injure himself through mistaken notions about the advantages of a singularity of style.

Dr. Uwins's work is divided into three parts—the first embracing "General Physiology and Pathology"—the second, "Synopsis Nosologiæ Methodicæ"—the third, "the Symptoms, Causes, and Treatment of Diseases." The first part is his own—the second is Cullen's—and the third is public property, the child of adoption by hundreds before Dr. Uwins.

Dr. Dawson has constructed a scheme of nosology for himself, on which he has engrafted a short system of pathology and practice, apparently the result of his own observation and reflection. Dr. Dawson has, in our humble opinion, taken a very judicious view of the causes, pathology, and treatment of diseases; and although he is, as we said before, sometimes a little too positive and dogmatical, and generally too concise; yet we have seen few works of this description, in which there are so many proofs of sound judgment, as in this unostentatious performance.

It is with the first part of Dr Uwins's work, of course, that we can have any thing to do. It opens with the often discussed question—"*is medicine a science of certainty or conjecture?*"—"*What claim has it upon public estimation?*" In respect

to the first question or part of the question, every body knows that medicine contains a little certainty, and much uncertainty. Of *conjecture*, there has been no lack, from the earliest ages down to the present time. The second question, respecting public estimation, is answered by the public itself. There is scarcely a human being, gentle or simple, pious or profane, from George IV. to the most wretched inhabitant of St. Giles's, who will not fly to medicine the moment that disease assails. *In health*, the saint will tell you that this life is a winter's day of sorrow, and that the things of this world are beneath the notice of a man of wisdom. But let him be overtaken by disease, and he will drain every phial of physic with as much eagerness as the mere man of this world. *In health*, the bon vivant, the debauchee, the scoffer, and the sceptic, will all laugh at physic, and quiz the doctor. But place these worthies on the bed of sickness and it will soon be—"Oh! dear doctor, how I did long for your arrival!" With these facts hourly before our eyes, where is the necessity for agitating the question of "public estimation." The doctor does not force his services on the public, or, like the lawyer, enveigle the client into an expensive suit. His attendance is perfectly optional on the part of the rich—*and generally gratuitous when poverty makes its appeal.* Do we see much of *this last* at the bar, or even in the pulpit, where it might be expected? No! But the public see and feel these things—and estimate accordingly.

Nosology, by Dr. Uwins is voted an absurdity.

"The very nature, then, of medical evidence is totally inconsistent with attempts to identify and arrange diseases, as you name and classify a plant by its generic and specific characters; and the assumptions of the nosologist are altogether based upon an error in principle. They suppose the existence of something which really does not exist, and it is amusing, or rather perhaps I should say humiliating, to open volumes, and find learned authors elaborately discussing the legitimate ranks and seats of morbid affections in nosological schemes, when the scheme itself, in respect of its abstract nature, is as little entitled to regard, as the question of the schoolmen on the number of angels that might dance upon the point of a needle without interfering with each other's evolutions—angelic being assumed subtile substance, as opposed to the materiality of the needle's point." 5.

After this angelic dance upon needle points, we certainly were a little astonished to find Dr. Uwins copying Cullen's Nosology from alpha to omega, as a very useful portion (50 pages) of his "COMPENDIUM." Dr. Uwins could not help anticipating this feeling on the part of his reader, and has apologized accordingly.

"With these announcements of feelings, in reference to nosology, my reader may deem me inconsistent in selecting *any* scheme for the present purpose of producing an epitome of medical science. But the fact is, we have only a choice of evils, and must endeavour, out of these, to select the one that makes the nearest approach to good." 6.

The nearest approach to GOOD would apparently have been the nosology of GOOD himself—but our author thought otherwise, and therefore selected the least of two *evils*.

The question respecting nosology is, we imagine, very much narrowed, by all men of observation and reflection.—The order and arrangement of nosology facilitates the acquisition of our *elementary* knowledge of disease—it has little effect on our *practice*, after experience has been acquired at the bedside.

The Circulating Function is the first physiological subject discussed by our author. The pros. and cons. for and against the vitality of the blood, are delineated, and then, as usual, a middle course is steered—that is, Dr. Uwins supposes the blood to be vital in one sense, and not vital in another. "To call this fluid the vital fluid, is, in one sense, correct—in another, erroneous."

"As the primordium of all other organic parts, solid or fluid, the blood has some legitimacy of claim to the epithet distinctly of vital; but I would be bold to say, that in Mr. John Hunter's application of the term it has not. All parts of an organised being are properly vital, while they constitute portions of the bodies integral, and to fix, even by implication, vitality (which is but an expression of the whole), upon certain parts, is to fall into the error of the *entity* philosophers, to search for things that are not to be found, and which have no real existence." 8.

In respect to the mechanical part of the circulation, our author trims his "neat-built wherry," between those who advocate the doctrine of alternate dilatation and contraction in the arteries corresponding with the systole and diastole of the heart, and the other party who deny that the arteries contract and dilate according to the filling and emptying of the left ventricle of the heart.

"With respect to the controversy to which I have just adverted, and aimed at giving an outline, I think *a sort of intermediate opinion* would in this, as in most controverted points, prove nearest the truth. Certain it is, that the capillary arteries possess a projectile power of considerable independence upon the heart; but it must be recollected, that in these vessels, or rather in this part of the arterial organization, the blood moves rather in a continuous stream, than in the jerky manner of the larger branches;

this independence, then, of the capillary circulation upon the heart, together with the altered manner of movement at the point where such independence commences, might be taken rather in proof of, than an argument against the doctrine of arterial action; but still we find in both sides of the question, considering it as an abstract one, considerable difficulties; and the great problem respecting the actual *quo modo* of the blood's transmission from, and reception into, the source and centre of circulation, remains yet unsolved." 19.

Inflammation, as one of the deviations from health in the circulating system, is, of course, descanted on, and the two great contending hypotheses—*diminution and increase of action in the capillaries*—are examined with our author's peculiar logical acumen. Dr. Uwins is happy here, as elsewhere, in finding the golden mean.

Auream quisquis *mediocritatem*
Diligit, *tutus* caret obsoleti
Sordibus tecti—caret invidenda,
Sobrius aula.

"If there be any correctness in what has been above advanced, in reference to the essentials of inflammation, it would seem, moreover, to follow, that the dispute is somewhat idle and unmeaning, whether inflammation be weakness or strength, action or torpor, obstruction or other impediment: it is all and every thing as the general frame and local incidents shall vary; and, both as to pathological essence and practical indication, abstract views ought to be kept as much as possible from influencing judgment. We shall afterwards have occasion to see that stimuli are called for under some circumstances, and anti-excitants under others; the disorder being nominally the same, nay, that both principles may be brought correctly and beneficially to bear upon one and the same condition." 26.

From inflammation we ascend to fever, and here it will be seen that Dr. Uwins has judiciously steered wide of the errors into which Clutterbuck, Broussais, Marcus, Mills, and their disciples have run. The extract is rather long; but it furnishes a good sample of the manner, as well as the matter of our author.

"But is fever, the question still recurs, a local or general disorder? Does it happen as a consequence of some primary irritation falling upon a *part* of the body, and in this way producing a series of associate actions differing from healthy movements; or, is the first impulse made upon the totality, as it were, of the frame, the perturbed movements being nature's hurried efforts to set all to rights again, *as the surprised soldiers of a suddenly besieged town would hurry some to the citadel, some to the outposts, and some they know not where, but all intent to repel the attacks of the enemy.*

"It has always appeared to me, that those theorists who will

have a local origin of fever, as lords to rule over them, overlook too much what is of every day and ordinary occurrence in the way of febrile induction, without the perturbation to which I allude becoming so forcible or permanent as to engender positive or specific fever. If I am subjected to a certain quantum of fatigue, or if things about me become hurried and irregular instead of due and orderly, I become feverish, my skin is hot and dry, my spirits depressed, and my thoughts and perceptions confused. Now, another individual, not perhaps more robust than myself, shall be exposed to the same source of derangement, but shall either not at all be affected, or shall be affected in a different manner—what would break down his energies, would lock up mine—what would exhaust him, would confuse me. Withdraw the morbific excitants in either case, and my restoration shall at least be as speedy as that of my friend. Have, then, my brain or mucous membranes been *inflamed* under this condition of things, or has any local mischief been brewing, which shall thus have been speedily dissipated? Is not the more consistent explanation of the affair this, that the whole machine has *at once* fallen out of its consentaneous order, and demands to be readjusted before actual health can be predicated? And the same principle would appear to apply, and the same process but in a more marked manner, to take place when the exciting causes act with more intensity, so as to produce real and lasting, in the place of ephemeral and slight disease. Does inflammation never take place in fever? Most certainly it does, and that very frequently too: but the inflammation, whether of the brain, or the membranes, or viscera, is not primary and characteristic, but secondary and incidental. The identifying, then, of fever and inflammation is an instance of modern generalization which does not appear to me to be countenanced by fact. I shall be asked what is the difference between pneumonia or inflammation of the lungs, and fever, and must confess the question presents some difficulties, in reference to febrile pathology altogether: since, if we say that inflammation of the lungs is a local, while fever is a general disorder, it may be replied, that a general commotion, marked by shivering and shrinking, often ushers in the one as well as the other. The truth is, I believe, as I shall afterwards have occasion more particularly to point out and illustrate, that the idea of local disease altogether has been too loosely admitted, and that topical is, for the most part, a mere manifestation of universal affection. Still there is a distinction between fever and inflammation. Who has not observed, for instance, how different inflammation of the lungs and its attendant fever is from fever and its attendant inflammation of the lungs? In the latter case, we have the *languor cum arteriarum pulsu inordinato* of authors, the peculiar animal depressions that characterise genuine fever; while, in the other case, there shall be the height of topical pain and systematic disturbance, without this attendant expression of sentiment, or cerebral disorder. "Cerebral disorder," would one class of systematics repeat after me, you have now conceded to us all that we desire; we contend that inflammation of the brain, and fever, are one and the same thing, and you, in terms,

have subscribed to our postulate. Not so. Brain disturbance is very different from brain inflammation; and although the febrile state very frequently indeed becomes a real inflammation of the encephalon, it does so merely from the circumstance of the sensorial organ being the organ most implicated with the deranging influence, and thence most vulnerable to the attacks of veritable inflammation.* In a word, and to conclude, that species of deviation from the healthy standard to which nosologists have applied the term fever, is a consequence of an hitherto undefined, or at least unexplained, derangement of the nervous organization, manifested by sensorial disturbance and vascular irregularities, to which, for want of more precise notions and definite conceptions, the words spasm. and inflammation, and congestion, have been applied, with some degree of rectitude, it must be admitted, but still with an objectionable freedom and decision, inasmuch as, after all, even allowing the legitimacy of the terms, they are but statements of results and incidents, while they lay claim to developments of source and essence." 38.

Our readers are well aware, that the essential points in the foregoing extract have been urged and upheld in this Journal for more than ten years past. We are happy in having the support of Dr. Uwins on this occasion: but we expect to be called upon soon for a more elaborate defence of our opinions —and from this task we shall not flinch.

Contagion. The discussion of this important question naturally arises out of the subject of fever—and here our author "ut mos est," closely adheres to the advice given by Phœbus to Phaeton—"in medio tutissimus ibis." The following passage is certainly in Dr. Uwins's best style, and as such we are happy to introduce it to our readers.

"What are the kinds and species of fever? Some will tell you fevers, whatever types they assume, are one and the same thing; and that there is no difference, but in the imagination of the nosologist, between the virulent plague of the Levant, and the low fever of a London alley. Others, again, divide and subdivide to an enormous amount, under the feeling that every new modification of the ailment, in acknowledging a distinct source, demands a distinct appellation. Here, as in almost all disputed points, we, perhaps, shall find truth taking its stand at about mid-distance between

* "Were fever inflammation of the brain, it could not subside, as it often does, in a moment almost of time, after a long continuance, without leaving any traces behind it of organic mischief. Had it been inflammation that was going on during the long protraction of continued fever, the common and necessary consequences of inflammation could not fail of invariable manifestation. Fever, it is readily allowed, does very often, indeed, induce topical and chronic ailments, and, in these cases, a species of inflammation has grown out of the original disorder; but events of this kind are not uniform, and the topical sequelæ are not always in the head."

the poles of contention. It is the opinion of some, that genuine fever never can originate without the agency of what is called contagion; others, on the contrary, as I have before intimated, go so far as to deny the existence of contagion altogether, except among a few specific distempers; while a third party are ready to admit contagion as an agent in the production of fever, but, at the same time, contend that the disorder may be elicited from other powers, such as the undue operation of cold and heat, famine, repletion, filth, and mental agitation.

"What is the meaning of the word contagion? It is, by the general acceptation of the term, a something in which, coming in contact, either immediately or intermediately with the body of an individual previously in health, engenders a disease in that individual of a nature precisely similar to its own—it implies, in a word, specific poison. What is infection as opposed to contagion? If I take a journey to Constantinople while the plague is raging in that city, and if, by consequence of my residence there, I fall sick of plague without having come in contact in any way with the matter that shall have emanated from the body of another person who is the subject of plague, I receive an infectious malady. Here, then, is the difference between an infection and a contagion—that the one is atmospherical, or only through the medium of the unhealthy air communicable, while the other implies communication, either direct or indirect, with a something issuing from the body of the sick. In either case, indeed, a contact with a poison is, strictly speaking, supposed; and hence, there is some impropriety in basing the notion of difference upon the assumption of different operation. I am disposed to think, indeed, that much of the intricacy that attaches itself to the question of contagion and infection, originates in this very source; that is, a variety in *modus operandi* is presumed, which is really non-existent. Let us imagine that a patient dies in the Levant, of the disease called plague, and that the clothes in which he died are conveyed to this country, embued with the poison of plague. An inhabitant of our metropolis procuring and putting on these clothes, might be affected with a certain dose, if I may so say, of disease; but still, though the virus might be as active *in se* as, had the same appropriation been made of the habiliments at another quarter of the globe, yet the resulting distemper might nevertheless, be various—and in that case, you would say of the individual that he had taken an infectious, as well as a contagious distemper. In this way, then, the question may be viewed as standing out in a tangible form. Is there any reason to believe that some disorders are entirely of an abstract nature, dependent solely upon their several exciting sources, without reference to time, place, or circumstance? or does the modifying power of place always, to some extent, operate upon the nature and aspect of a distemper? For my own part, I am disposed to think it does, so that, although in one sense I incline towards the sentiments of the anti-contagionist, I, in another, recede from his inferences, even much further, than does the contagionist himself; for I believe, that from the most decided case of small-pox, down to a nursery cold, there is something commu-

nicable in the maladies, and something operative in the atmosphere." 40.

Passing over the exanthemata, the profluvia, and other heads, we come to the "sensient and motive function;" but we are too sick of the theories of "nervous agency" to enter upon this subject here. Dr. Uwins takes a desultory review of the different hypotheses regarding the nervous system, and concludes without any thing being concluded.

The "ASSIMILATING FUNCTION" next succeeds, and a series of remarks on the physiology and pathology of this portion of our system, is given by our author. We do not see any thing, however, which particularly requires comment here.

We have now surveyed the first part of the work, and have presented sufficient specimens to enable our readers to form a conception of Dr. Uwins' manner and execution. To the *matter* we have little or no objection to make, as Dr. Uwins has steered, in general, a middle and safe course, between contending theories. But, to our author's style, we decidedly object. It is exceedingly inflated, in many places, and not seldom disfigured by unnatural metaphors. We refer the reader, for an example, to our author's illustration of the onset of fever, in which he compares the human frame to a suddenly-besieged town, where all is confusion and tumult. Surely such metaphors as these are not calculated to make a favourable impression on his scientific brethren. To us it appears that Dr. Uwins has completely ruined his professional style and language by his long habits of writing on medical subjects for the popular magazines and reviews. In this species of composition, precision is exchanged for point—perspicuity for brilliancy—homely and *appropriate* illustration for gaudy and *irrelevant* metaphor—and last, not least, sober argument for seductive rhetoric. These observations are well exemplified and confirmed in the case of Dr. Uwins's celebrated predecessor in this walk of literature—the late Dr. Reid. That physician had great command of language, and he pushed his power to the utmost; but what was the consequence? His whole work is a tissue of fine words, polished sentences, and sparkling metaphors, conveying either no ideas at all, or those of the most common-place, tinselled, lacquered, and gilded for popular exhibition. In short, Dr. Reid's *brilliant* pictures of *Melancholy* constantly remind us of chimney-sweepers on a May-day—all gold, in appearance, outside—and all soot, in reality, within.

Dr. Uwins has run into an extreme the reverse of Dr. Reid. Instead of selecting his expressions and polishing his

sentences, he appears almost to have studied uncouthness—and in pursuit of colloquial simplicity, he has not seldom bordered on vulgarity. Of this he seems a little conscious himself, as may be gathered from the following passage in his preface.

"With respect to its construction, I have aimed at a familiarity of style. In this aim I have probably failed, and may be found to be dogmatic and vulgar, while wishing to be impressive and colloquial; if so, I have failed in power rather than in feeling, and must be pardoned on the score of good intention. To one thing I can conscientiously and confidently speak; namely, sincerity of purpose; and the circumstance may, in part, be taken as a guarantee for that sincerity, that some of those individuals, with whose doctrines the greatest freedom has been used, are among my most respected friends." viii.

For all these professions we give our author full credit—for not one of his friends entertains a higher respect and esteem for Dr. Uwins, as a gentleman and physician, than ourselves. Our strictures are purely critical of the book, and have no other reference to the author.

We now proceed to the main part of the work, the symptoms, treatment, &c. of diseases, passing over, of course, the nosology of Cullen. This part, then, appears to us (though by far too concise) a fair epitome of the best established matter that could be drawn from standard sources of information in the English language, mixed with a certain portion of personal observation, of no great extent, and followed by formulæ for the exhibition of the remedial agents recommended. We do not think we could better or more fairly characterise this portion of the volume, if we were to employ whole pages for the purpose; we shall, therefore, offer a single specimen, taken without the least selection.

"Genus XIV.—Anxiety; Gastritis.

"Typhoid pyrexia; heat and pain in the epigastrium, increased by taking any thing into the stomach; an inclination to vomit; and immediate rejection of the ingesta; hiccup.

"*Symptoms.*—Gastric inflammation brings with it extreme depression of spirits, and prostration of strength; the pulse is often very small, at the same time that it is rapid and contracted. Urgent thirst prevails, and the pain is sometimes increased by pressure upon the region of the stomach. The tendency of the disease is often towards gangrene, unless resolution be early accomplished; and if gangrene occur, although the heat and pain remit, the pulse increases in rapidity, hiccup and coldness of the extremities succeed, and life is soon terminated.

"*Remarks.*—Gastric inflammation of an acute and phlegmonous kind, is of much less frequent occurrence than might *à priori* be

supposed. It has been observed, that in collections of morbid preparations, there are fewer instances of disorganization from this cause, than from almost any other; the diseased appearances of the stomach that are met with being, for the most part, either those of slow and chronic inflammation, or irritation of a specific nature, as of schirrus, affecting either the pyloric or cardiac orifice of the organ.

"*Causes.*—Acrid or indigestible substances taken into the stomach; alternations of temperature; draught of cold water, while the body is hot; suddenly repelled eruptions, and metastasis, especially of gout.

"*Diagnosis.*—From spasm by the pyrexial symptoms, and burning heat; from enteritis by the seat of the pain; also by the burning sensation, vomiting, and tendency to hiccup, even before the gangrenous termination, which in enteritis is a mark of gangrene having commenced.

"*Prognosis.*—If, in the course of two or three days, the pain and sickness cease, while the pulse becomes more free or full, and diminishes in frequency, the urine depositing a sediment, and the bowels becoming spontaneously loose, a favourable termination may be expected. The unfavourable symptoms are a continuance of disease for several days, the pulse increasing in frequency, and hiccup remaining in spite of the medicinal processes.

"*Treatment.*—General blood-lettings, and the free application of leeches to the epigastric region; afterwards warm fomentations, and a blister, the copious employment of mucilaginous diluents, such as linseed tea, good barley water, with gum acacia dissolved in it. Emollient anodyne clysters are likewise to be injected.

℞ Tincturæ opiif ʒss.
Mucilaginis amyli,
Aquæ puræ āā f ʒvi.

Fiat enema.

Or these may be more purgative.

℞ Olei ricini f ʒiij.
Decocti hordei f ʒv.

Fiat enema.

"Endeavour to allay irritation by the exhibition of the following draught.

℞ Potassæ subcarbonatis ℈j.
Succi limonis f ʒss.
Tincturæ opii ♏vj.
Aquæ puræ f ʒss.

Fiat haustus.

"Pills, with a grain of calomel and a grain of opium, administered three or four times in the course of the day, will be found sometimes to allay pain, and arrest inflammatory action.

"The erythematic inflammation which is often consequent upon a long habit of intemperance, especially in the use of spirituous liquors, is, for the most part, best met in the way of medicine, by very small doses of mercurials joined with one or more of the vegetable narcotics.

℞ Pilulæ Hydrargyri,
Extracti Hyoscyami,
——— Conii, āā gr. ij.
" Fiant pilulæ duæ, nocte maneque sumendæ.

" When the irritation is of that nature which leads to scirrhus of the pylorus or the cardia, the above combination of medicinals will be found useful in allaying pains, and thus mitigating the sufferings of the patient." 188.

The principal defect in the work, is the great neglect of pathology—that is, an account of the changes which parts undergo during disease, and the *post mortem* appearances. If, in the next edition of the work, Dr. Uwins would take the trouble of adding a head of this kind to each genus of disease, he might cancel the whole of the first division of the book, to make room for this additional specific information, and thus render the performance a truly valuable acquisition to the student and junior practitioner.

We now come to the second work on our list, though the first in order of publication. Dr. Dawson has arranged his nosology into five orders, viz.—1. Febrile diseases—2. Inflammatory diseases—3. Nervous diseases—4. Cachectic diseases—5. Functional diseases. This nosology may be " simple, intelligible, and consentaneous with his own experience;" but we fear it will be found as imperfect as other systems of nosology now in use. This we do not impute to our author as a fault—because we are convinced that any thing like perfection in nosology, is unattainable by man.

Although pretensions are not made to much originality (strictly speaking) in the matter of Dr. Dawson's volume, (which indeed it would be unreasonable to expect) yet we almost always find him judicious in the selection of materials from others—and correct in the judgment which he comes to as the result of his own observation and reflection. These two qualifications are the most important ones which the author of a systematic work can possess. To exhibit much novelty in a performance of this kind, would be to exhibit much error. The development of new and *true* knowledge is extremely slow—and must come piece-meal from a number of labourers in the vineyard of science. No man ever did or ever will proclaim a *new system* of medicine, of more than a very temporary duration. Brunonianism is a recent and memorable example in our own times. But much may be done by systematic writers, in correcting a few of the errors of their predecessors, and adding a little to the store of established facts. This is all that can be rationally looked for, in the present state of things.

Dr. Dawson has avoided the defect which we noticed in Dr. Uwins's work, namely, the omission of the pathological state, as ascertained by dissection. Dr. D. has appended to each disease a short sketch of the appearances *post mortem*—a thing too much neglected in all our English systems, but which is now indispensable.

The classical allusions in this work are pleasing to the reader, and creditable to the author. They are generally appropriate; but, we think, sometimes a little overstrained, if not erroneous. Thus, when on the subject of dysentery, our author introduces the following classical allusion.

"Cornelius Nepos, in his life of Atticus, the friend of Cicero, records the particulars of the disease that destroyed him, which was most probably a dysentery. He observes, that he had been remarkably healthy for thirty years, when he contracted a tenesmus, which was deemed to be of no importance. Three months passed without his experiencing any pain, when "subito tanta vis morbi in unum intestinum prorupit, ut extremo tempore, *per lumbos fistula putris eruperit*: atque hoc priusquam ei accideret, postquam in dies dolores accrescere, febremque accessisse sensit." 159.

Now we confess we cannot see any positive proof of dysentery, as the cause of death, in Atticus. To us it appears much more like lumbar abscess. It has not been our lot ever to see dysentery without pain—and the "*per lumbos fistula putris eruperit*," has little to do with the disease under consideration. In fact, we cannot construe it in any other sense than *lumbar abscess.*

We can select but a few specimens of the work before us, to show the matter and manner. Our first example shall be from the 1st class—or febrile diseases. After making some acute remarks on debility and spasm, our author proceeds thus to comment on some more recent doctrines.

"My friend Dr. Armstrong, distinguished by his successful writings, has divided typhus into simple, inflammatory, and congestive;* but these can only be viewed as different stages of the same fever, arising accidentally, frequently blended, and therefore unworthy to be considered as constituting three grand divisions. Yet it must be admitted, that Dr. Armstrong's varieties,—they are nothing more,—are of considerable practical utility, and are founded upon the different phenomena of the disease, which are of common occurrence. Unquestionably we often meet with a simple typhus, where, from beginning to ending, no inflammatory or untoward symptom occurs: in like manner, typhus sometimes shows itself with a remarkable disposition to inflammatory affections of particular organs; and, lastly, it cannot be denied, but another kind

"* Armstrong's Practical Illustrations, &c. London, p. 9. 1816."

of typhus does, although more rarely, appear, where it is neither simple nor inflammatory, but a fever in which there is a great and dangerous oppression, without any efforts in the system towards reaction. Such a fever is named congestive, which is a popular, and not a philosophical, term—and, like most popular terms, it is incorrect. Congestion, if it mean any thing, must mean obstruction—what obstruction? It is presumed, the patrons of the word mean—of the vascular system; for what else can they mean? Now congestion, in the sense it is used by the authors of it, having a general application to the whole of the vascular system, is, during life, physically impossible; for congestion of the vascular system is death, and what actually takes place in death. How can a system so important be congested, be obstructed—for that is the true import of the word? The fact is, in congestive fever,—the word is used for the sake of distinction,—there is not, and cannot be, any congestion, or obstruction of the whole of the vascular system; but the vascular and nervous systems are greatly oppressed by the violence of the morbid power, and this oppression imperiously demands venesection, which relieves the body from an injurious load, and induces reaction. Dr. Good, so laudably sensible of the faults of other nosologists, has made fever a disease of the vascular system, and Dr. Armstrong has done nearly the same; yet the nervous system, as will be adverted to hereafter, is equally, nay, perhaps, more engaged; so that, in accordance with Good's own doctrines, fever might have ranked under his *Neurotica* with great propriety. If ever any disease deserved the name of universal, that disease is fever, which acts on the whole body at once with resistless violence. No candid man, who attentively observes the phenomena of fever, can think the vascular system is principally affected; since he ought to know that the affection is universal, and particularly involves the nervous system. Dr. Clutterbuck, with an ingenuity and talent which do him honour, has asserted and attempted to prove fever to be, at all times, an inflammation of the brain.—This will not do: it is to mistake an occasional effect for a constant cause. But for this unhappy prepossession, he would have ranked high among the authors on fever; since it is not easy to discover his superior. No doubt the brain is affected in fever; but this is attributable, not to inflammation, but to the disorder of the nervous system. Inflammation sometimes attacks the brain, and sometimes any other viscus, as may be expected during a hurried circulation, where the weakest organ, from an influx of blood, becomes *bona fide* congested, which congestion is the essence of inflammation. Dr. Reid, of Dublin, refers fever to the spine,—another unhappy prepossession, retarding instead of advancing truth. Such views are truly unphilosophical: they narrow an important subject, which disdains such petty limits. If fever have "a local habitation and a name," it is in the whole body, and not in a particular organ or organs. These cerebral, spinal, and congestive attachments, strongly resemble the love-infatuations of early life, which commence in misconception, are perpetuated in folly, and clung to with an obstinacy proportionate to the worthlessness of the object." 33.

We can make room for only one more extract, which, however, is rather a long one, but one of much interest, and containing a good deal of originality.

"III. *Gastrodynia.* Excruciating pain in the stomach, of uncertain occurrence and duration. Health commonly unaffected.

"Gastrodynia, sometimes, but not always, connected with dyspeptic symptoms, is, and ever has been, a common and agonizing disorder in every age and nation, rendering the subject of it miserable, and inadequate to every exertion, whether of pleasure or business. It can scacely be termed dangerous; for it often exists a number of years, without destroying the general health. What can be its cause it is difficult to surmise:—probably, flatus in the stomach, or an acrimonious state of the gastric juice:—in other instances, doubtless disease of the stomach; but here death speedily ensues.

"Virgil, a name well known to every scholar, "was often troubled with a pain in his head and stomach," clearly the consequences of dyspepsia; for he led a sedentary life, and was of a "sickly constitution and swarthy complexion."* Cicero,† the most anxious of mankind, as he himself acknowledges, suffered severely; and was only relieved by vomiting a fluid which he thought was pure bile. Claudius, the fourth emperor of Rome, endured grievous pain in his stomach, so as to lead him to contemplate suicide:—"*stomachi dolore. Quo se correptum etiam de conciscenda morte cogitasse dixit.*"‡ A certain well known London secretary was miserable, from a painful feeling in his stomach, something similar to rats eating the villous coat. Gastrodynia is a more common complaint than the world imagines; yet it attracts no notice, and gains no sympathy, inasmuch as the health is unimpaired and the appetite usually good, although the digestive organs are always more or less disordered. The spirits are invariably depressed; and, during the paroxysm, every sensation is distressing, and every feeling horrible. The time of the accession of the paroxysm, and the duration of it, are alike uncertain. The pain may come on in the morning, afternoon, evening, or middle of the night:—according to my own experience, night and morning are the most common periods. With regard to the continuance of the pain, it may be an hour, two, three, five, or six, and considerably longer, if permitted to proceed unmolested. A hearty meal or a copious drink of a stimulating fluid sometimes brings temporary relief. The pain is aggravated by walking, and slightly mitigated by reclining on the left side, and applying pressure by the hand. In some cases the pain is always in the stomach, and in the stomach only; but in others the pain does occasionally, for a short period, quit that organ, and, as it were, indifferently and fancifully affects the back, sides of the spine, or the integuments covering the sternum and ribs, thus implying the presence of flatus in the stomach. The pain itself is

"* Davidson's Virgil, in Vita Virgilii, vol. i. London. 8vo. 1748."
"† See his Letters during his Exile. Valpy's Latin Edition. 12mo."
"‡ C. Suetonius Tranquillus, in Vita Claudii."

of a peculiar, and even of a varying nature. It is not acute, it is not lancinating, it is not spasmodic; it is neither sickening nor dragging:—they best can tell who have felt it:—the pain is *sui generis*: it is of an excruciating aching kind, and of the most soul-depressing nature. The patient can stand upright, but he naturally bends the body, and presses with his hand, to obtain partial relief. Walking, reading, talking, or sleeping, are absolutely impossible. I have known a gentleman lie on the floor in agony, and have three distinct attacks, of three, four, and six hours, during twenty-four hours. Sometimes the stomach feels empty; at other times, it seems distended, and gives rise to bitter or saltish eructations.—Yet the patient, even on the rack of pain, is not ill; and the instant the pain ceases, he is as well as he could wish. It deserves to be noticed, that this pain scarcely ever exists with pain in the head; and if, which seldom happens, the head becomes affected, an almost instantaneous abatement of the gastrodynia occurs. According to my experience, gastrodynia is comparatively harmless, when neither vomiting nor emaciation prevails.

"Such is a faithful history of gastrodynia, a miserable complaint, which has been scarcely mentioned in medical books. For gastrodynia, medicine, with a single exception, is useless. The blue-pill, bitters, purgatives, antispasmodics, all, all are unavailing. Yet, fortunately for suffering humanity, fortunately for men of talents and genius, who are the greatest sufferers from it, there is a certain remedy; but, unluckily, being only palliative, it demands repetition. Had the efficacy of this remedy been sooner known to me, it would not have been my painful lot, as it now is, to write of racking paroxysms enduring for hours, or the principal part of a winter's night. The remedy is tincture of opium. Every one naturally flies to this drug in pain; yet its virtue has been unsuspected, once even by myself, in gastrodynia, in consequence of the smallness of the dose. In fact, the striking efficacy of opium, and the frequency of gastrodynia, amongst the higher ranks of life, are the causes why that medicine is so constantly and liberally taken by the statesmen, judges, lawyers, poets, authors, and actors, of the present day, whose names I conceal from delicacy. They undergo great mental exertion, and enjoy little exercise; meanwhile the stomach, that fruitful source of incalculable ills, disdains to be a passive spectator. I shall cite a single instance of the practice of taking opium, among the intellectual class; and for the truth of which I pledge my honour. A well known living poet, sixteen years ago, occasionally walked into a druggist's shop, and swallowed there, with the most perfect indifference, one-third of an ounce of Turkey opium, and two ounces of the tincture. His health appeared to be good: he sometimes took wine or spirits; but whether he now continues the use of opium, I am ignorant. A deceased and venerable judge, whilst sitting on the bench, has frequently been seen to drink the contents of a small phial, doubtless containing either the tincture of opium, or the black drop.

"When a patient suffers under a severe attack of gastrodynia—for, during the interval of ease, opium is unnecessary,—he should

immediately take one hundred drops of tincture in cold water, presuming he is a total stranger to that drug, and repeat half of the dose within three quarters of an hour, if the pain continue. The paroxysms are usually daily:—unfortunately, opium is not a preventive, and rarely effects a radical cure:—and, therefore, on their accession, however slight, the dose must be taken; for, should it be omitted, the patient will, in a few hours, or next morning, suffer a most severe paroxysm; whereas, if he take it, he will certainly remain well until the accustomed period of attack. The opium commonly induces constipation, which may be easily removed by a daily draught of the compound infusion of senna with quassia. The misfortune is, that a long continuance of the exhibition of opium requires a gradual augmentation of the dose; so that if a person begin with a drachm, and continue it daily or nightly for a year, he will then probably require five or six drachms for a dose. This is, however, unavoidable; and it is the same with stimulants of every class.

"It may be said, to take opium is a great evil—it is so; a most painful necessity: but it is a far greater evil to pass one half of life in excruciating pain, and the other half in miserable anticipation. It would be madness to reject a positive good for the possibility of a problematical and distant injury. The gastrodynic sufferer has a choice of evils: for him there is no middle path: he must either contentedly endure a pain which makes life a burthen and renders talents useless, or take opium;—for where is the man who, racked with pain in his stomach night and day, can perform his duties in society, and enjoy human life as it ought to be enjoyed? Again, where is the evil complained of? Excepting idiosyncrasies of constitution, opium apparently does good, and not harm; since it removes, within half an hour, a most agonizing pain, which would, without it, remain for hours, with the probability of a speedy return. It may be observed, certainly the patient is better during the influence of opium; but how does he feel hereafter? What is meant by hereafter?—the next day, or years? If the next day, the answer is most triumphant, inasmuch as the patient feels infinitely more lively and active than at any other period of his life:—if for years, the reply is not less triumphant, if we appeal to notorious facts, the only and best appeal in all doubtful cases, since almost all those who have indulged in the use of opium, probably from pain in the stomach, are now to be seen in the possession of good health and the enjoyment of old age. Many of them are either speaking in the senate, delivering judgment from the bench, exciting emotion on the stage; or producing works which rival those of antiquity. This ought to be a conclusive answer to the individuals who imagine that opium injures the health and destroys the intellectual faculties.* The largeness of the dose is sometimes objected to; but this is a most unphiloso-

"* The poet who took such enormous quantities of opium above sixteen years ago still lives, and continues to write admirable poems, one of which received the particular notice of Lord Byron."

phical mode of argument, and founded upon ignorance of the principles of the animal economy. Medicines act on the system, according to the impression which they make on the part acted upon: —if therefore, one ounce of the tincture of opium produces the same effect as a single drachm once did, the one quantity is as harmless and influential as the other. At this moment a sufferer from gastrodynia is near me, who took last night eight drachms of tincture of opium with success and pleasure; and he assures me, that eleven months ago, when he commenced with it, sixty drops occasioned a more lasting and sensible effect.

"Where gastrodynia is the result of organic disease, the effects of opium are temporary indeed, but most generally it is merely functional; and in such cases, incomparably more numerous, an adequate dose of opium speedily and completely dissipates the pain, invigorates the stomach, raises the spirits, and improves the general health: and when this pain returns, which it mostly does once in twenty-four hours, the repetition or augmentation of the dose again subdues it,—so that by such means gastrodynia is reduced to a most insignificant ailment; whereas, if not so treated, it would probably terminate life in a few years by anxiety, sleeplessness, exhaustion, and pain. Far be it from my mind to advocate the cause of the unhappy sensualist, who, enduring no pain, takes opium merely for the pleasurable sensations which it excites; no,—I only advocate the cause of him, who, stretched on the rack of pain, swallows that drug to restore him to ease, to talents, to usefulness." 300.

In the above extract there is much that we can confirm by repeated experience—partly personal. To the therapeutic portion, *as regards opium*, we demur; but rather from theory than practice, as we candidly confess that we have not often given opium a fair trial. We are convinced, however, that Dr. Dawson has somewhat underrated the powers of other medicinal agents, at least in the less grievous forms of this distressing disease. We have found the volatile alkali, in conjunction with magnesia, mint-water, and, occasionally, the tincture of henbane, very useful, especially when a rigid animal food diet, and a moderate allowance of good wine, or brandy and water, were carefully adhered to. The sulphate of quinine we have recently found an excellent medicine in gastrodynia.

We must now part from our author, not without being impressed with great respect for his talents, erudition, and professional judgment. The work itself, though rather too concise, contains, we will venture to affirm, more correct pathology and sound practice than any systematic work of the same size in the English language.

IX.

Researches, Physiological and Pathological; instituted principally with a View to the Improvement of Medical and Surgical Practice. By JAMES BLUNDELL, M.D. Lecturer on Physiology and Midwifery at the united Hospitals of St. Thomas and Guy. Octavo, pp. 146, two Plates. Cox & Son, Borough, December, 1824.

PHYSIOLOGICAL experiments are much more rare in this country than on the continent—especially France. The reason seems to be that, in the latter country, physiologists make experiments for the purpose of discovering some object—while here, our physiologists experiment with a direct, and generally useful object in view, and in the hope of attaining that object. This last course is, we imagine, the only laudable and legitimate one which we ought to pursue. We do not hold man so high, nor brutes so low, in the scale of created things, as to imagine that the feelings and the lives of the *latter* should be wantonly expended in satisfying the mere *curiosity* of the *former*. It is true, that animals must die to feed man, or man himself might perish; but it must be remembered, that death in *this* way is a very different kind of thing from death by *physiological experiment*. The guillotine and the Indian torture are somewhat different *modes* of coming to the same result!

Dr. Blundell has long been known as a zealous cultivator of the science he professes; and not only a zealous, but an able one. The first part of the volume before us consists of a paper which was read in the Medico-Chirurgical Society about two winters ago, but not published—for what reason is only known to "the Committee of Public Safety," in their aggregate of wisdom and plenitude of power assembled.

Some of our author's experiments certainly appear somewhat equivocal in respect to the *cui bono;* but still it must be conceded that there is always an object in view, physiological or pathological; though that object does not always seem in close correspondence with a directly useful or practical purpose. Dr. B. observes that, of all the branches of surgery, there is none which admits of greater improvement than the surgery of the abdomen. Under this impression, he has been induced to accumulate the facts and observations contained in the Essay under consideration. We shall take a rapid coup d'œil of the principal experiments here brought forward.

From four rabbits Dr. B. extirpated the left kidney, through

an incision about an inch in length, the kidney being drawn up through the wound, and the superior half of the peritoneal attachment, thus put on the stretch, included with it in the ligature. All these animals died—two from the inflammation supervening on the operation—one from the formation of a sac in the place where the kidney had previously lodged—and one from cause unascertained.

In seven experiments our author removed the spleen. The two first rabbits died in a few days, of peritoneal inflammation—the third survived three months, but ultimately died of diffused peritonitis and the formation of a sac in the site of the spleen. The fourth died in a few days, of purging and peritonitis—the fifth recovered for a time, but at the end of six months began to pine, and died at last of abdominal inflammation. The sixth and seventh rabbits recovered permanently.

In five rabbits he opened the abdominal cavity, over the bladder, in the course of the linea alba—punctured the fundus vesicæ with a lancet, and secured the aperture by ligature. Of these, three recovered completely—and two died, one of them fourteen days after the operation, the other seventeen days. In two rabbits, Dr. Blundell cut off at least one quarter of the bladder at the fundus, by one stroke of the scissors, a ligature having been previously applied. One of them lived seven months, and then died of the purulent sacs already mentioned. The second survived, and still lives, fat and healthy.

Into the peritoneal cavities of four rabbits, our author injected about an ounce of human urine—left it there an hour, and then discharged it, washing out the peritoneum thoroughly with tepid water. They all suffered much collapse from the experiment, but seemed soothed by the injection of tepid water. Of these, the first sunk under the primary impression of the operation—the second died in sixty hours from peritoneal inflammation—the third died from diffused and very active peritonitis in nineteen hours (the urine having been very negligently washed out)—the fourth rabbit recovered completely.

Of seven rabbits, into whose abdomens the *decoctum quercus* was injected, six died and one recovered.

The peritoneal inflammation, in all the more decisive cases, was marked by serous effusion—accumulation of adhesive matter—agglutination of the viscera—and, in some instances, by so thorough an injection of the capillary vessels, as to produce a petechial appearance.

From the facts ascertained by the preceding experiments, the following inferences are drawn by Dr. Blundell:—

"1st. Large apertures into the peritoneum of the rabbit do not immediately induce a dangerous prostration of strength. In all my experiments, I never once observed any marked collapse in the animal at the moment when the peritoneum was laid open, though I was in full expectation of it. When urine was injected, collapse was immediately and evidently produced.

"2dly. Large apertures into the peritoneal sac, in the rabbit, are not necessarily, nor perhaps generally, productive of fatal inflammation. Of eighteen rabbits, not only opened, but subjected to further violence, five only died from this cause.

"3dly. In the rabbit, the kidney, the spleen, and a large piece of the bladder, may be extirpated without necessarily causing death; though death under the first operation is probable.

4thly. When the abdomen is laid open, and parts are removed from it in the rabbit, the first danger arises apparently from collapse, the second from general inflammation, and the last from chronic topical disease.

"5thly. The rabbit's abdomen is very tender, probably no less so than that of man. Of twenty-nine rabbits, twenty-one died more or less directly from the operations performed, some of them, it must be confessed, violent ones; and it should be observed particularly, that five out of seven rabbits died from the splenic operation carefully performed; though both cases, hereafter recorded, in which the human spleen was removed, under circumstances to appearance highly unfavourable, terminated in complete and uninterrupted recovery. The general impression left on my mind by many observations, is, that the abdomen of the rabbit is, on the whole, no less tender than the human.

"6thly. It follows, from the former inference, that success in abdominal operations on the rabbit, furnishes a presumption in favour of success in similar operations on the human abdomen; and therefore, from these experiments, we may infer *presumptively*, that moderate openings into the human peritoneum will not necessarily, nor even generally, prove fatal from inflammation or otherwise; and, further, that certain viscera or parts of viscera, not essential to the welfare of our structure, may be removed from the belly without necessarily, or even generally, producing death. The extirpation of the kidney must be highly dangerous; but there is a presumption in favour of the successful removal of the spleen, the ovaries, or even of large pieces of the bladder." 12.

From these *presumptions*, drawn from experiments on the rabbit, our author proceeds to what history teaches us respecting the human frame itself. Of the slighter injuries of the abdomen, resulting from tapping—slight wounds (not penetrating the intestines)—hernial operations—Pott's case of extirpation of the ovaries, &c. our author does not think it necessary to take notice, as they are familiar examples. But—

"Of severer injuries of the abdomen, with their results, the following may be adduced as having, with few exceptions, fallen

under my own notice, or that of my friends; and, as possessing an authenticity, on which, where there is no observation to the contrary, I can thoroughly rely. These, as it will be perceived, so far as they furnish inferences at all, confirm those taken from experiments on the rabbit; and form, apparently, a part of one harmonious system of facts, which mutually support each other.

"1st. One case, the only one I know of, in which the mouth of the womb was torn off, and came completely away; large bleeding and collapse were produced, but the patient recovered. My friend, Mr. Scott of Norwich, carefully investigated this case, and Dr. Merriman of London is now, I believe, in possession of the preparation.

"2dly. One case, in which, from defective formation of the external genitals, the child's head could not readily pass; it forced its way into the rectum, and was born at the anus, occasioning three large rents, two laterally and one forward: the woman recovered without any very pressing symptom. Mr. Harrison of Greenwich, had the woman ultimately under his own care; and himself, in conjunction with my friend Mr. Gaitskell, obliged me with the relation of it.

"3dly. Four cases of chronic inversion of the womb, in which the uterus was extirpated by ligature, at different ages.

"One, a case under the care of Mr. Chevalier. The woman in this instance was, I think, about sixty; and for years previously had ceased to menstruate: no bad symptoms seem to have occurred.

"The second, a case under the care of Mr. Newnham. The woman was about twenty-four. Some difficulties arose from the extreme irritability of the patient, but the greater part of the womb was got away. The preparation of the womb I saw myself. The woman is still doing well, and it is now six or seven years since the operation was performed.

"The third, a case in which Dr. Hull of Manchester operated. The patient was excessively irritable and intractable, and some difficulties occurred as in the former instance, but the operation succeeded. Dr. Hull himself related this case to me in a conversation between us.

"The fourth, a case of my own, in which the greater part of the womb was removed by a wire ligature. It came away in eleven days. This patient was of a tranquil torpid habit; and not one bad symptom occurred.

"4thly. One case has fallen under my observation, in which a fall from the top of a coach occasioned a transverse rent through the abdominal coverings, above the abdominal rings, on the right side, four fingers broad at the least. The intestines hung out. The man recovered in a few weeks. The intestines still protrude at this part, pushing the abdominal coverings before them, and forming a ventral hernia. The scar of the rent is still apparent. The man was under the care of Mr. Green, one of the surgeons of St. Thomas's Hospital.

"5thly. Two cases, (may be mentioned,) the only ones within my knowledge, in which the human spleen was removed.

"One, that of the soldier whose side was laid open by a sabre wound at the battle of Dettingen, (if my memory serve,) the spleen protruding and lying out for some hours in the dirt. It was removed by the surgeon. The man recovered, and seemed to suffer afterwards no inconvenience referrible to the want of the spleen. Mr. Cline used to relate this case.

"A second, that recorded by Dr. O'Brien in his inaugural dissertation.* The case was under his own personal care. The man was a native of Mexico: the spleen lay out for two days before the surgeon was applied to: the bleeding was profuse: the vessels and other connexions were secured by ligature, and the spleen separated completely from the body on the twentieth day of the wound. On the forty-fifth day the man was discharged from the hospital, cured; and observed to some one about this time, that "he felt as well as ever he did in his life." There was bloody urine till the tenth day, (the only bad symptom which occurred during his recovery,) the kidney having most probably received a wound at the time when the side was laid open.

"5thly. Three cases may be cited, in which the dropsical ovary was rent, probably extensively, from external violence: they are all that have been brought under my notice, and all terminated favourably. For the full authenticity of the following I pledge myself.

"An unmarried lady, with dropsical ovary, was thrown on the ground with violence, from a two-wheeled carriage, and struck the enlarged abdomen with considerable force against a stone which lay by the road side. A large discharge of urine followed; she became permanently freed from her dropsy; and marrying, died with a retroversion of the womb, which could not be replaced. On inspection, the remains of a ruptured ovarian cyst were discovered, retroverting the uterus, which was firmly fixed in the retroverted position, by means of inflammatory adhesions.

"This case, which may be relied on as authentic, gives additional probability to one related by the late Dr. Kissam of New-York, who was a fellow-student of Mr. Gaitskell at Edinburgh, and much esteemed for his activity and talent. In this, as in the former instance, the lady had an ovarian dropsy of many years standing, clearly distinguishable through the abdominal coverings. No abscess occurring, for several days afterwards, a trocar and canula were introduced into the peritoneal sac, and twenty-six pints of bloody serum were drawn off; the patient, notwithstanding the double injury from the rent and operation, getting well without any alarming symptoms. (*New England Journal of Medicine and Surgery*, Vol. V. p. 225.)

"The third case deserves notice, especially as corroborated by the two former, which it resembles. There was swelling in the region of the right ovary, equable, smooth, and without distinguishable fluctuation; pain shot occasionally in the course of the round ligament down the thigh; the left limb first, and afterwards

* Edinburgh, 1813.

the right, became œdematous; the general health was little impaired. When straining to reach something on a high shelf, the patient felt some part give way within her, and examining herself immediately afterwards, she discovered that the circumscribed tumour had disappeared, and that there was general abdominal swelling in its place. For a length of time afterwards she seemed to be recovering from this injury, and died, with a scirrhus of the uterine organs, and not, as appeared, from the accident. (*Idem.*)

"6thly. May be narrated two cases, in which an opening was made into the abdomen, with a view of extirpating the dropsical ovary.

"In the first, the operation failed completely. The woman had never been tapped, the ovary held about a pailful; a scirrhous piece, as large at least as the hand, not easily removed, was left in the belly; great collapse occurred, directly the ovarian sac was drawn forth, before it was cut into; but the woman lived between eighty and ninety hours afterwards, without the occurrence of peritoneal inflammation, and died, apparently, from the cachexy produced by the dropsy, and for want of re-action in the system and the wound.

"In the second case, the ovarian cyst was extirpated by Dr. Nathan Smith, formerly, I believe, of Connecticut. (*See American Medical Recorder of Original Papers and Intelligence in Medicine and Surgery, No.* 17.) The sac contained about eight pints; there were no adhesions of extent and importance; the natural connexion of the ovary was as large as a finger, and the patient got well without a bad symptom.* Dr. Nathan Smith is well known to some gentlemen now in London, and would, I have little doubt, if this were deemed necessary for the sake of science, give proof convincing to the most sceptical of the authenticity of this case. These are the only three operations that I at present know of, coming so immediately under my notice, as to justify citation: at the two first I was myself present. I question much whether, in the first operations of lithotomy and amputation, the proportion of recoveries was so great as one in two.

"7thly. May be mentioned five cases of laceration in the womb or vagina, occurring during parturition—all of which were ultimately brought under my personal notice, though in one case only was I present when the accident occurred.

"In the first, the child was born alive by the natural efforts, and the side of the womb was torn longitudinally, where it unites with the broad ligaments; the woman sinking, of consequence, from flooding. I was requested to inspect the body; the rupture of the womb had not even been suspected during her life.

"In the second case, the vagina, or neck of the womb, was lacerated behind, to the extent of a large hand-breadth: the peritoneum being laid open, a clot of blood as big as the hand was found, after death, in the abdomen: collapse occurred, the patient never rallying thoroughly, though she lived for thirty-six hours.

* "I quote from my adversaria, as I have not been able to lay my hand on the original in time for the press." 19.

"The third case resembled the former: the woman died collapsed in about thirty-eight hours: there was, however, more reaction than in the former case.

"In the fourth case the womb was torn in front, and the child escaped into the belly; the bladder was not injured. Collapse occurred in this case, and death took place in less than twelve hours.

"The womb was torn in front in the fifth case also; the child, as before, escaping into the peritoneal sac. I brought this fœtus away by turning; had my hand among the intestines and on the edge of the liver; felt the large arteries in the back of the abdomen and grasped gently the empty and contracted womb. The child was brought away dead; the woman recovered pretty completely in the course of four or five weeks, but has never been in a state of robust health since. Her name was Casey; she lived near St. George's church, Southwark; and before her recovery was complete, she came, for greater conveniency, into Guy's Hospital. A few months back, (*i. e.* five or six years after the accident,) I made a careful examination, when no traces of cicatrix were discoverable in the vagina, and the mouth of the womb felt perfectly sound and natural, so that there can, I think, be no doubt that the parts had been torn through above." 21.

We have to apologize for the length of the foregoing extract, though it is probably unnecessary; for we think our readers have long been aware that we never quote a passage where the matter can be abbreviated in our own language.

Every one knows the formidable nature of the *Cæsarian section*, and the general fatality of the measure. Our author informs us that, by a friend of the late Dr. Haighton, it has been thrice performed—once successfully, where the abdominal wound was healed completely on the sixth day, the woman being able to stir about in her house on the thirteenth day. The other two cases were unsuccessful.

From this small collection of facts, *favourable and unfavourable*, our author modestly admits that no *certain* inference can be drawn—though *presumptive* inferences may, to the following effect:—

"1st. That smaller wounds of the peritoneum, as in tapping, hernia, &c. do not, in general, induce fatal peritonitis, or other destructive effects; and, therefore, that the common opinion, not perhaps found on paper, but frequently urged in conversation, and apparently operative in practice—I mean, that inflammation in a spot of the peritoneum, will almost invariably diffuse itself over the greater part of it, is probably unfounded in truth.

"2dly. That extensive divisions of the peritoneum are certainly not of necessity fatal, whether by inflammation or other wise; and probably not generally so.

"3dly. That the womb, spleen, and ovaries may be taken away

in the mode mentioned, certainly without of necessity destroying life, and *presumptively* without generally destroying it.

"4thly. That the womb, when developed from pregnancy, may be torn open; that the child may escape into the peritoneal sac, among the viscera; and that the mouth of the womb may be torn off, not indeed, so far as these cases may be relied on, without great danger, but twice, in seven instances, without death.

"5thly. And generally, that the peritoneum and abdominal viscera, though very tender in the human body, will, without fatal consequences, bear more injury than, from their modes of practice, the British surgeons, especially, seem disposed to admit.

"6thly. That all the above inferences, from observations on the human abdomen, are in unison with those drawn from observations on the rabbit, the one set of inferences mutually supporting the other; and in this we have a fact corroborative of the principle for which I have contended elsewhere, that observation on the brute and human subject, when made with caution, may, perhaps, be found more in correspondence with each other, than some surgeons are disposed, at present, to admit. A contrary opinion, so far as it is erroneous, must exert a very baleful influence upon the progress of surgery." 24.

As the facts recorded in the paper create a suspicion, in our author's mind, that a "bolder abdominal surgery" would not be unattended with success, he has ventured to solicit the attention of the profession to the following operations—"all to appearance feasible, though by no means all of equal promise"—and none of them to be hazarded except "*in cases otherwise desperate.*"

1st. A division of the fallopian tubes, and even a removal of a small piece of them, so as to render them completely impervious—a fit addition to the Cæsarian section, and, of course, with the view of preventing subsequent impregnation, without destroying the sexual propensities. Dr. B. thinks this operation desirable in those cases of contracted pelvis, where, notwithstanding the excitement of premature labour in the seventh month, it is still necessary to destroy the child, by opening the head. An opening, says he, two fingers broad, might be made above the symphysis pubis, near the linea alba. The fallopian tubes might then be drawn up to this opening one after the other, and a piece of the tube taken away. This operation, he thinks, is much less dangerous than delivery by perforating the head, when the pelvis is highly contracted.

2nd. *Extirpation of the healthy ovaries*—an operation which he admits "can scarcely, in any instance, be necessary," though he thinks "it would probably be found an effectual remedy in the worst cases of dysmænorrhœa, and in bleeding from inverted uterus." We think this proposition borders on the wild and extravagant.

3d. *The extirpation of the ovarian cyst in scirrhus, combined with dropsy, or in simple dropsy.* This operation, our author is persuaded, will ultimately come into general use. "And if the British surgeons will not patronize and perform it, the French and American surgeons will." In despite of all that has been written respecting this cruel operation, we entirely disbelieve that it has ever been performed with success—nor do we think it ever will.

4th. *The removal of a large circular piece of the cyst, in ovarian dropsy, when the sac itself cannot be extirpated.*

This proposal is founded on the fact that, as rupture of the ovary has apparently cured the disease, by laying the cyst open, and thus probably inducing inflammation, so advantage might be gained by the operation here proposed, and on a similar principle.

5th. "*The removal of a cancerous womb, when the ulceration first makes its appearance.*"

Such a removal, *above the pubis*, we think extravagant in the extreme.

6th. "*Extirpation of the puerperal uterus.*" Ditto repeated.

7th. "Should the bladder give way into the peritoneal sac, and I have two preparations of this accident, why should we not lay open the abdomen, tie up the bladder, discharge the urine, and wash out the peritoneum, thoroughly, by the injection of warm water? This operation would secure a chance of life, if the urine had not been extravasated long, say above half an hour." 28.

8th. Small openings with callous edges, through the neck of the bladder into the vagina, are cured in France, it is said, by the actual cautery. "When the opening is large," says Dr. B., "it may probably be closed by ligature, without a bad symptom."

9th. Gastrotomy, in case of intus-susceptus.

This operation has been performed, but never with success. See art. Ileus, in the *Dict. des Sciences Medicales.*

We submit our author's proposals to the tribunal of the professional public, without further comment.

II. The second paper in this essay is on the mysterious process of generation. We cannot afford space to detail the experiments made by Dr. Blundell, to ascertain the disputed point, whether or not the accession of the semen to the female rudiments be necessary to the process of fæcundation. The result of Dr. Blundell's experiments is in correspondence with what we should conclude from anatomy, and from com-

mon sense—namely, that the seminal accession *is* necessary to the formation of the new animal, though certain changes in the organs of generation (uterus and ovaries) do take place when the said seminal accession is prevented. The following short passage contains the whole result of the experiments.

"On the whole, then, it seems probable, judging from the appearances related, that generation may be carried forward to a certain extent, although the access of the semen to the rudiments be intercepted. Under these circumstances, the young animal cannot be formed, it is true; but corpora lutea may be generated; the wombs may be developed; and the rudiments, if we may judge from the facts already stated, may even be transferred to the uterine cavity by the play of the fallopian tubes." 49.

Before we dismiss this subject, there are one or two physiological points connected with it, which are deserving of notice.

"It has been asserted by some naturalists, that the corpus luteum is an evidence of genuine impregnation. It seems *certain*, however, from the facts related, that this evidence cannot be relied on; for the luteum, in these experiments, was generated under circumstances in which, as the event proved, impregnation was impossible. Indeed, there seems to be little reason for doubting, that the corpus luteum may be produced, even independently of the sexual intercourse, by the mere excitement of desire in a very high degree. Mr. Saumarez has recounted experiments, in his "New System of Physiology," in which the *luteum* appears to have been generated in this very manner. I have now in my possession a preparation (for which I stand indebted to Dr. Cholmeley and Mr. Callaway,) consisting of the ovaries of a young girl, that died of chorea, under seventeen years of age, with the hymen, which nearly closed the entrance of the vagina unbroken.—In these ovaries, the corpora lutea are no fewer than four. Two of them, it must be acknowledged, are a little obscure; though an experienced eye, I conceive, would readily detect them. The remaining two are very distinct, and differ from the corpus luteum of genuine impregnation merely from their more diminutive size, and the less extensive vascularity of the contiguous parts of the ovary. In every other respect, in colour and form, and the cavity which they contain, their appearance is perfectly natural, indeed, so much so, that I occasionally circulate them in the class-room, as accurate specimens of the luteum upon the small scale." 57.

The above consideration is evidently an important one, in a forensic point of view, and ought to be borne in mind in medico-legal investigations.

The appearances detailed in the experiments, combined with others, afford a plausible proof that the semen sometimes penetrates as far as the ovaries—a point which has been much controverted. In the varieties of human generation, we some-

times meet with extra-uterine pregnancies, where the ovum not only lodges in the tubes, or the peritoneal cavity, but in the ovary itself—a form of disease the most common of its kind.

"Now, if it be true, as I have endeavoured to prove, that the young animal cannot be formed unless the semen have access to the rudiments, it is evident, that in these pregnancies, in which the fœtus is generated among the graafian vesicles, the semen must have made its way up to the ovaries themselves. It must not, however, be too hastily inferred from this, that the semen always penetrates into these remote recesses of the genitals. Facts have been related, which give a shade of probability to the conjecture, that without the contact of the semen, the rudiments may sometimes descend into the uterus; and certainly, although the opinion is not without its difficulties, it is not impossible that they may meet each other there."* 59.

III. *Transfusion of Blood.* This is the last subject discussed in the volume before us, and occupies a considerable space. We can allot but a limited space for the analysis of it. The subject of transfusion is one on which little can be said in the way of reasoning—all must depend on facts, or actual experiments. We see instances, indeed, where life is lost by the simple issue, from divided or patulous vessels of a certain quantity of the vital fluid. And, as we have no proof that the blood loses its vital properties in the transit from one animal to another, it would appear reasonable, or at least feasible, that a timely recruit of the pabulum of life, in cases of the above nature, might ward off the fatal event. We mean cases of wounded arteries or veins—and uterine hæmorrhage.

"Now, in cases of this kind, (and I might enumerate others which have fallen under my personal notice,) when the patient is gradually sinking, and the bleeding is suspended, there is a fit opportunity for trying the operation of transfusion; and, unless we are prepared, in the face of opposing facts, to deny the utility of the operation altogether, it must, I think, be admitted that it would be used, in such emergencies, with the fairest prospect of preserving the patient's life." 65.

With the view of elucidating this subject, our author made a number of experiments on dogs—draining them of blood till apparent death took place, and then injecting blood from the carotids of other dogs. The time which elapsed between apparent death and the introduction of fresh blood, was various—from half an hour to five minutes. In only one instance (interval five minutes) was resuscitation effected. In

"* Is the transfer of the semen beyond the womb the cause of extra-uterine pregnancy?"

this case "the effects were immediate. Shuddering first occurred, then respiration, then vascular action, and ultimately complete recovery." From these experiments there can be little drawn that is favourable to transfusion, after asphyxia from hæmorrhage has actually taken place; yet, our author thinks that there is sufficient to bear him out in the assertion that, "in cases of this kind, in which there is no other hope, the operation may deserve consideration." For numerous experiments, ingeniously devised, and skilfully executed, with the view of ascertaining the best modes of transfusion, and how far the blood of animals (differing in species) may be injected into the veins of one another, we must refer to the volume under review, from page 66 to page 136.

We now come to the end of the work, in which is given a very brief account of six cases in which injection into the human veins was attempted.

1. Our author was called to a woman who was dying (as supposed) of loss of blood during placental delivery. The patient had ceased to respire before Dr. B. entered the room. In five or six minutes afterwards, about sixteen ounces of blood were readily procured by venesection (from two men) and thrown into a vein in the arm of the deceased. No signs of resuscitation were observed.

2. A young muscular man, in Guy's Hospital, lost a large quantity of blood, from the bursting of an artery—and appeared for two or three hours afterwards to be evidently sinking from inanition. Our author did not arrive till some minutes after respiration had ceased. Blood was injected; but, with the exception of a single sigh, no signs of returning life were perceptible. There was no difficulty experienced in the transfusion.

3. This was a case of placental hæmorrhage, where the transfusion was commenced before respiration ceased. But the supply was inadequate, and no good effect was the result.

The fourth case was equally unsuccessful.

"5. A poor fellow in Guy's Hospital, (his name was Brazier) between thirty and forty years of age, lay at the point of death, in consequence of the extenuation produced by obstinate vomiting, arising, as afterwards appeared, from scirrhosity of the pylorus. At the request of Dr. Cholmeley, and the expressed wish of the patient, the late Mr. Henry Cline and myself injected, by means of the syringe, twelve or thirteen ounces of blood into the vein usually laid open in venesection, when no ill symptoms, fairly referrible to the operation, were produced. During the first thirty hours afterwards, there was an increase of strength, and the man appeared mending; but at the end of this period, he began again to sink into a state of collapse, similar to that which had preceded

the operation, and died about fifty-six hours after the injection.—Not a single bad symptom occurred when the blood was introduced. Could the operation have been repeated, it is not improbable that his life would have been prolonged."* (p. 78.)

6. This was the case of hydrophobia, about which so much bruit was made in the newspapers, not long ago. Our author remarks respecting Magendie's *imagined* case of hydrophobia as follows:—"respecting the operation of Magendie, I think it better to give no opinion favourable or repugnant, till further information." We were the first in this country to deny the reality of the hydrophobia in Magendie's case—and this opinion is now the general one on the continent.

Our author concludes (and so do we) that "whether it be possible to save a patient, when sinking from hæmorrhage, by injecting blood before respiration ceases, these cases do not enable us to judge."

"But, to conclude. The preceding paper contains all the facts, favourable and unfavourable, which are come to my knowledge, and which seem calculated to help the mind in judging, respecting the operation of transfusion. On perusing them, every one who is in the habit of reflecting, will, of course, form an opinion for himself: having, however, thought a little on the subject, I may be permitted to state my own persuasion to be, that transfusion by the syringe is a very feasible and useful operation; and that, after undergoing the usual ordeal of neglect, opposition, and ridicule, it will, hereafter, be admitted into general practice. Whether mankind are to receive the first benefit of it, in this or any future age, from British surgery, or that of foreign countries, time, the discoverer of truth and falsehood, must determine." 142.

We part from Dr. Blundell with feelings of the highest respect for his zeal and talents.

* See in Med. Chir. Trans. vol. x. a fuller account of this case."

X.

Symptomatology, or the Art of detecting Disease, a Lecture occasionally read to the Pupils at the Westminster Hospital, and published according to their Request. To which are added Tables of Symptoms. By ALEX. P. BUCHAN, M.D. F.L.S. late Senior Physician to that Institution, and Member of the Royal College of Physicians, London, 12mo. pp. 190. London, 1824.

SYMPTOMATOLOGY has not hitherto taken its due station in the course of medical studies,—at least, in this country. It is but very lately, indeed, that we have been put into possession of the *first* distinct treatise on this subject, if we except the very inadequate and imperfect performance of Dr. Berkenhout, published in 1784; we, of course, allude to the Essay of Dr. Marshall Hall, of which we gave a review in our number for March last. And, considering that there is certainly no dearth amongst the fruits of the medical press, we cannot but remark this fact, as perfectly extraordinary and unaccountable.

It will be our object, in the course of the subsequent observations, to draw the attention of our readers to the subject of symptomatology, by pointing out to them the all-important and essential nature of this department of medical science, and the still inadequate mode and degree in which it has been investigated and developed. We undertake this task with the more satisfaction, because we have the confident hope that it will induce some individuals to take up the inquiry; and, especially, that it will, as we trust, stimulate that physician who has already laboured in this fruitful field, to continue his exertions, by observing that they are, at length, obtaining the notice they merit with the profession at large.* He will perceive that we have not hesitated to borrow some ideas from his little volume, in pursuing our present strictures on the subject of symptomatology.

Our first remark, with the view of establishing the importance of this study, is, that it is, in fact, the ONLY one which *can avail us in the sick room or ward.* It is the only clew which can lead us out of the labyrinth of our doubts or per-

* We understand that the Essay on the Symptoms and History of Diseases is again out of print, and that a third edition is in the press.

plexities respecting the nature and identity of the disease, and respecting the effects of the remedies which have been administered. Whatever our views may be, they are only to be established or corrected in practice, by the symptomatology. The diagnosis and the prognosis, the indications and the effects of remedies, are equally learnt from the same source.

Our second observation is, that ALL our other knowledge is made *practically useful* ONLY *through the medium* of symptomatology. Of what *use* is the most minute and perfect knowledge of morbid anatomy, unless we have the means of ascertaining its existence in the living body? The facts in morbid anatomy are valuable, as all facts in science must be acknowledged to be; but they are *practically* useful only in the degree in which we are enabled to establish their existence in our patients, and this can only be done through the medium of symptomatology.

What then can have been the reason, that this most important of medical studies has been so long neglected by our practical writers, and that there should be but two or three works on the subject in our language? It is, we think, on account of its great difficulty. There is no study which requires so much cautious observation, so much patient reserve, so much repetition, in coming to our conclusions, as that of symptomatology. If a hasty observer were to give us a system of symptomatology, it might be diffuse, but it would want all that is valuable in this department of medicine—namely, *great accuracy*. Many symptoms occur in the course of a disease, which are not essential to it, or at all characteristic of it, but perhaps the result of some complication, or the effect of some remedy. Cautious and repeated observation alone can ascertain these facts, can distinguish between those symptoms which are essential and those which are accessory. If these be blended in a treatise on symptomatology, all is confusion. If there be, then, one qualification for the writing of such a work more absolutely necessary than another, it is *reserve*.—Thus the beginning of a disease is often characterised by a different series of symptoms from its middle and later stages; and especially towards the conclusion of a disease, many changes take place in the morbid anatomy, and in the state of the vital powers, all which must be accurately observed and reobserved and associated with their appropriate symptoms, before any sound advancement can be said to be made in the study of symptomatology.

These observations are completely confirmed on reading some of the works written on this subject. After almost every

paragraph, we are apt to stop and say "this is vague," "this is doubtful." And this leads us further to remark, that another cause of the neglect of symptomatology by our practical writers has probably been the manifest dissatisfaction experienced on reading those treatises which have been written on this subject. This defect is not, however, we venture to say, inherent in the subject itself—but the result of a too hasty and unripened observation. In this study, especially, we all want our wings clipping, and must be content to proceed very slowly; we shall then, however, be enabled to note useful facts in symptomatology, and to form useful, because cautious, associations of the symptoms as the sign, and of the morbid state as the thing signified. And whatever difficulties beset us in our attempts to *write* on symptomatology, precisely similar difficulties attend the application of our knowledge of morbid anatomy to the practical purposes of our art. It is useless to write on symptoms, except as *signs* of diseases, and morbid anatomy is equally useless, except it be ascertainable in the living patient by such *signs*. In both departments of medical science it is the accurate association of the symptoms and of the disease, which constitutes at once the great difficulty, and the practical utility of our investigations.

Attended and surrounded as it is by all these difficulties, symptomatology is thus, then, the only part of our knowledge which is available in actual practice. This fact, which is undeniable, *must* arrest our attention. And we trust it will not fail in procuring from our readers all that consideration which is due to the subject.

It is said to have been a favourite saying with the late Dr. Cullen, that there are, in physic, more *false facts* than *false theories*. The observations which we have already made, will, we think, suggest the probable foundation for this remark, admitting it to be true. But the remark itself should lead us to inquire into the causes of this fallacy respecting our conclusions and supposed facts in medicine, and into the probable mode of obviating it in future. If our facts be "false," it must either be from there being but a *defective* evidence for them, or from the evidence we have being imperfectly brought to bear upon them. In order to determine these points, it will be necessary to recur to the sources of our evidence for facts in medicine, and to those mental processes by which this evidence is seized and elaborated into use.

It is obvious, in the first place, that all our knowledge in regard to disease, is obtained through the medium of the *senses*, especially those of sight, hearing, and touch, though the sense

of smell is by no means useless to the attentive and practical physician. It does not appear to be necessary to insist upon the great importance of an assiduous cultivation of the powers of these inlets to our knowledge. But it may not be entirely useless to urge upon our junior readers, for whom these remarks are chiefly intended, the great advantage of an *early* cultivation of the powers of our senses, and especially of those processes of the understanding habitually and almost unconsciously attendant upon our perceptions. Dr. Buchan observes—

"It is now generally admitted, that all our ideas, all those at least concerning external nature, are conveyed to the perceptive principle through the medium of the senses. But the several senses do not transmit their impressions to the mind in the same manner. The senses more immediately subservient to the support of individual life, touch, smell, and taste, are excited by immediate contact of the substances, with the qualities of which they make us acquainted. But the eye is affected through the medium of the rays of light, and the ear through that of the vibrations of the air. The information derived from the former senses may be termed immediate, from the latter mediate. Of the former class of sensations, that chiefly employed in the investigation of disease, is the touch, from which however the surgeon derives more knowledge than the physician.

"To enable us to detect the nature of the various diseases to which the complicated structure of the human body renders it liable, it is our duty to cultivate the senses, through which we derive a knowledge of their nature; which, let it be observed, are, like all the other faculties of man, capable of being improved.—We should endeavour to acquire the tactus eruditus, the visus eruditus, and now that it is found practicable to detect affections of the lungs by sounds produced by striking upon the thorax, also the auditus eruditus." 16.

That faculty which has generally been termed *tact*, is by no means mere pretending or idea. It is the result of an assiduous cultivation of the senses, and of the powers of perception and judgment; for it is to be observed, that these processes ever follow the exercise of the sense. We cannot illustrate this proposition more clearly and forcibly than by an allusion to the act of feeling the *pulse*. How much the physician learns from this act, by a process of reasoning of which he is scarcely conscious, and the analysis of which would certainly cost him much trouble, but would amply repay his curiosity! He takes the peculiar modification of the pulse, in connexion with *all* the circumstances of the patient, in an inconceivably short space of time;—the age, the disease, the remedies which have been administered, each modify the pulse, and are each taken rapidly into the account, in his estimation of its value and its

indications; if the pulse be more frequent than it was anticipated it would be, every cause that might add to this frequency is made to pass in review through the mind, and the effects of corporal exertion, of mental emotion, of an error in diet, or of an augmentation of the malady, are estimated almost instantaneously. Similar remarks apply to all the other objects of our perceptions. But we have already stated sufficient to illustrate the *principle*, which is all that our space will enable us to do. We have only once more to press upon our young readers the importance of cultivating the faculties of perception—the spirit of observation—and that inestimable habit, at once, of perception and judgment, involved in our idea of *tact*.

The faculty of which we have just spoken, relates to our perception and judgment of each individual object of sense, in the persons of our patients. There is another faculty of equal moment, and even perhaps of a higher order, because still more complicated and refined, which may be termed the *coup-d'œil* of the physician. In tactics, such a faculty has been termed the *military eye;* and it is said by Livy, to have been possessed in a remarkable degree of perfection by Philopœmen, of whose studies, and of the modes by which he acquired this quickness of tactic perception, he gives an accurate and interesting account. In this account, *three* things may in particular be observed,—that the faculty was acquired, "*curis, cogitationibusque,*"—and "*ab ineunte ætate,*"—and that in forming his judgment, "*contemplatus est ab omni parte loci natura.*" These are the very points for acquiring the *medical* as well as the military coup-d'œil. It must result from much observation and thought; it must be cultivated in our early years; and it must be formed on *all* the circumstances of the patient and of the case. Dr. Buchan's remarks on this subject are highly interesting.

"But the capacity of discerning the nature of disease varies widely in different individuals. 'Quicquid recipitur, recipitur modo recipientis.' I have known instances of medical men, who, even after long-continued experience, could never clearly ascertain the nature and distinction of diseases, nor even put questions pertinent to their investigation; while others, as was said of the celebrated Fothergill, appear to possess an almost intuitive perception of the state of their patients. The possession or the absence of this faculty constitutes, in fact, the main difference between one medical practitioner and another. What Lord Bacon says of love, seems applicable to disease: 'Love,' says he, 'is not manifested by staring in the face, but is communicated by slight glances, and sudden quick sparkles of the eye." 17.

"We should be careful not to trust too much to the replies of patients or their friends to our verbal inquiries in the investiga-

tion of disease, but in preference attempt to interrogate nature herself. Doubtless there exists a pathological physiognomy well worth the attentive study of the industrious practitioner. Every internal disease of a serious nature, imprints upon the countenance of the patient a certain cast, or air, from which the attentive physician may derive an important diagnostic.

"It is related of the celebrated Dr. Stoll of Vienna, that he could distinguish the trade of every artisan, who applied to him for advice, by the peculiarity of his manner. I am myself acquainted with an individual, who possesses a considerable share of this peculiar discriminative faculty. Let us reflect, that the veterinary practitioner, and those persons who make infantile diseases the chief object of their attention, have no other means of guiding their judgment than attentive observation. The possession of this discriminative faculty in perfection, constitutes what has been termed the scientific tact, and forms, perhaps, the ultimate perfection of medical talent." 21.

The object of this faculty is the *general* aspect of the patient, and combinations of the symptoms. The processes of the perception of these various objects, of the reasoning founded upon that perception, and of the judgment which flows from this reasoning, are so rapid, that the knowledge thus obtained appears to be almost intuitive. But it is, in point of fact, the result of long habit of observing all the circumstances of the patient, first *seriatim*, and then in their various *combinations*. We must not enlarge upon this subject; but before we do quit it, we must be allowed to point out, that a great point is to *feel* the force of a consistency or of a discrepancy in the combinations to which we have last alluded. Acute pain in pleurisy, for example, prevents the patient from speaking in a loud and irascible tone of voice. The manner of the patient should then be consistent; and if it be not, we must either suspect that the pain is not so severe as it is represented to be, or not of an inflammatory character.

The cultivation of this talent must not, however, induce us to neglect the following judicious advice of Lord Bacon:

"Men use commonly to take a prospect of nature, as from a high turret; and to view her afar off; and are too much taken up with generalities. Whereas, if they would resolve to descend, and approach nearer to particulars and more exactly and considerately look into things themselves, there might be made a more true and profitable discovery and comprehension. The remedy of which error is, to go nearer to the object. And, therefore, there is no doubt, but if physicians, letting go generalities for a while, and suspending their assent thereto, would make their approaches to nature, they would become more complete masters of their art, and better enabled to accommodate their means of cure to the various states and conditions of diseased actions." 56.

Besides the cultivation of *tact*, and of the *medical eye*, to which we have already alluded, there is a species of *mental discipline*, more purely so termed, to which we should all submit ourselves. We shall exemplify the object of this mental exercise very briefly. And we would first observe, that the evidence for facts in physic is certainly not so indubitable, but we may, or rather do, frequently form wrong notions of the nature of a case. We should, then, cultivate great candour of mind, and, ever alive to fresh appearances, be ready on all occasions to rectify our opinions, if ulterior appearances should seem to point to a case of a different nature. In the second place, we should be ever aware that internal disease may not only be in a state of progress, but may involve other organs than those first affected. We should be constantly on our guard duly to appreciate these changes in disease. This remark is especially exemplified in the cases of fever, inflammation, and tuberculous disease: the first may be originally simple, but may in its course receive a most serious modification by the addition of some local disease in the head, chest, or abdomen; inflammation may be, in its commencement, confined to one of the abdominal viscera, but it may afterwards involve all the organs covered by the peritoneum, and even affect those of the chest; and it is very frequently observed that tubercles, although the symptoms may attach originally to the abdomen, pervade not only that cavity, but that of the thorax too, as well as other parts of the body. Let us not take *too simple and contracted* a view of cases; but let our inquiries occupy an enlarged sphere. In the third place, let us, in contemplating the disease, ever duly appreciate the superadded influence of the various potent remedies which may be employed; let us, in combating inflammation, have a just regard to the strength of the patient, and not, whilst vanquishing one foe, raise up another to be opposed in its turn. Pietro Aretino used to compare medicine to a torrent, which not only carries away with it the stones from a field, but likewise a good part of the field itself.—Verbum sat sapienti.

Another part of mental discipline is, ever to be guarded against implicitly receiving the answers of the patient himself to the questions we may put to him. Dr. Buchan judiciously observes:—

"A variety of circumstances render it often difficult to elicit from patients the truth, which we wish to discover. Internal sensations are always obscure, and therefore difficult to express, and the perception of them is frequently disturbed by the presence of unhealthy action. Disease, existing in one particular viscus, is frequently indicated by pain perceived, in a distant part of the

body; affections of the liver, for example, by pain in the shoulder. In examining patients, we have moreover to contend with anxiety of mind—with unintentional misrepresentation, arising from the object of our queries not being understood. Clearness of intellect too, is more or less obscured by the presence of disease, and thus common forms of expression do not always convey the same ideas to the patient and the practitioner. Even the friends of patients frequently mislead, by what they consider as well-meant misrepresentations respecting the previous habits and conduct of the sick person." 19.

"Unnecessarily to multiply our questions is always distressing to a patient. Irritability of temper is generally the concomitant of disease; and I have often observed that sick persons will frame such replies as you seem to expect, rather than be teased with a protracted examination. This is probably one reason why many persons resort to those, who pretend to discover the nature of diseases from the inspection of the urine alone, without asking any questions. Patients are moreover prone to consider too many questions as implying ignorance of the nature of their complaint. A lady once asked me in a peevish tone, how those persons who cured horses and dogs, found out what was the matter with them. We should, therefore, carefully endeavour to make ourselves acquainted with every obvious indication of disease; that may tend to diminish the necessity of troubling our patients with a multitude of interrogatories." 80.

Having thus briefly sketched our view of the mental processes by means of which we are enabled to collect the evidence for facts in clinical medicine, we now proceed still more shortly to state the *sources* from which that evidence flows. These are, then, the symptomatology, the history, and the morbid anatomy. It need not be concealed, that the last of these departments of study is that which, in the present day, "in honore est." We have, lately, repeatedly delivered our opinions on this subject. The reader may consult p. 63 of the present volume. From those observations, and from the remarks contained in the beginning of this article, it will be readily collected what we think on this still most important department of medical study. We would avoid the usual error of mankind, of passing from one extreme to another, from the extreme of overrating the importance of morbid anatomy, to that of denying its real value. The study of morbid anatomy has added greatly to our stock of knowledge, and has thus greatly benefited the practice of physic; but, as we have already said, in our actual visits to our patients, it is *not* the morbid anatomy, but the symptomatology which is our only and constant guide. We believe we state the truth too, when we allege that the English have studied the morbid anatomy to the neglect of the symptoms; and that the French

have done still worse, by investigating the pathology, to the neglect of what is the *end* of all—the remedy. We, however, in this Journal, will endeavour to place these matters in their real and true points of light: letting even-handed Justice hold the balance, we shall give to each of these branches of study its real weight and importance.

On the *history* of diseases, far too little has been written. The slight sketch of this source of the evidence for facts in clinical medicine, in Dr. Hall's work is almost the only one, indeed the only one, to which we can refer. We trust, therefore, that he will do the subject still more ample justice in the forth-coming edition of his useful Essay.

We have hurried over this subject, in order that we might again take up Dr. Buchan's little volume. We own we are rather astonished that, considering that Dr. Hall had so lately trod the same path, Dr. Buchan does not once mention his fellow-traveller. It was the least show of courtesy that could be expected. Dr. Buchan's work consists of an introductory lecture, from which we have already made some extracts, and tables of symptoms, "chiefly copied from the symptomatology of Berkenhout." That something far better, and far more useful and satisfactory, might have been written, or even compiled on this subject, we think we need not say. Still Dr. Buchan's work contains *some* good remarks: of these we shall make a selection, and with that conclude, for the present, our observations on symptomatology. We purpose, however, shortly to take up the subject again, to give some account of some foreign works upon it, especially those of M. M. Landré-Beauvais and Double.

Dr. Buchan observes, "The first question we put to a patient, is whether he feels *pain;* and the next, where the pain is seated." These are, at least, very important questions; and we are persuaded that an interesting essay might be written on the subject of pain alone: it would especially be important to give a *list* of the different kinds of pain—of those species of pain which portend disease—of those which occupy a seat distant from that of the disease, &c. We proceed to extract some observations on pain by our present author, as a specimen of his mode of treating his subject, without adding any comment, or being supposed to agree or disagree with him on the several points noticed by him.

"Pain in the front of the head generally indicates fulness of blood; in the occiput, or hind-head, exhaustion, or nervous debility, frequently consequent to fatigue." 25.

"Fixed pain seated over one of the eyes, which has been termed clavus hystericus, indicates torpor or debility of the stomach, generally removable by warm, bitter eccoprotics. Sudden darting

pains in the head, more especially if accompanied with perception of heat on the hand being applied to the forehead, dilated pupil, and strabismus, or squinting, in young persons, is indicative of the approach of hydrocephalus, a disease requiring the most energetic remedies."

"Pain of the small of the back is the precursor of fevers, particularly of the eruptive kind, and often indicates disease of the uterus. Acute pain of the bowels indicates inflammation, diarrhœa, dysentery, &c."

"Pain in the neighbourhood of the large joints indicates what is termed rheumatism; but if seated towards the middle of the long bones, especially if aggravated during the night, there is reason to suspect the existence of latent syphilis."

"Aching of the knee is symptomatic of disease of the hip-joint."

"Obtuse pain in the right hypochondrium, darting towards the scapula and top of the shoulder, is symptomatic of torpor or disease of the liver."

"A sense of pain and weight in the loins, accompanied with nausea, indicates nephritis, or inflammation of the kidney."

"A sense of pain and heaviness in the loins often precedes an attack of hæmorrhoids, and the first appearance of the menses in females. Pain seated at the scrobiculus cordis, indicates scirrhus of the stomach or liver: if very severe, and accompanied with costiveness, the presence of biliary calculi. Patients complain of this kind of pain as peculiarly severe."

"The recurrence of pain in a part formerly bitten by a rabid animal, even at a remote period, betokens the approach of that dreadful disease, hydrophobia." 31.

The following observations are made respecting the *pulse*.

"From the most remote antiquity physicians have been accustomed to judge of the relative states of health, and of disease, by the pulsation of the arteries, so termed from the notion that they were tubes for the purpose of conveying air. The physicians of Greece used to examine the state of the pulse by applying the back of the hand to that part of the thorax where the pulsation of the heart is most discernible. By the Romans, however, it was known that the pulse might be examined in various parts of the body."

"Only a slight sketch of the various indications to be derived from the pulse, can be attempted on the present occasion. The brief tract of the late respectable Dr. Heberden, affords an excellent example of strict philosophical disquisition on this subject. Bordieu's more extensive treatise on the discovery of the crisis of diseases from the pulse, is chiefly translated from a still more voluminous work on the same subject by Dr. Solano, a Spanish physician, the study of which will amply repay the attention it demands. I have myself verified at the bed-side of a patient, many of his minute, and what, perhaps, would be considered, by those who had not tried them by the test of experience, fanciful indications; and I have no doubt that many more of his prognostics

would be discovered to be founded in truth, by those who would carefully make the experiment.

"The Chinese physicians, it is well known, have long had the credit of paying very particular attention to the pulse: they even pretend to derive a much more minute and accurate knowledge of the state of the sick from that source than European practitioners lay any claim to. I possess a small volume, professing to be a view of the Chinese mode of judging of the pulse, translated by some of the original Jesuit missionaries. The patient is directed to be laid in bed, with his arm resting on a small cushion. The physician must be seated, and both parties are enjoined to remain calm, silent, and collected. The fingers are next to be applied in due succession, one after another, in order to judge of the compressibility of the artery. The Chinese do not infer solely from the rapidity of the pulsations. Their mode is to compare the number of pulsations of the artery with the intervals of the respiration of the patient. The number of pulsations of a man in moderate health they consider in relation to the time of a natural inspiration and expiration. Four beats of the pulse, during this period, they consider as indicating perfect health. If it exceeds five pulsations it is considered as too quick; if under that number, as too slow, respecting good health."

"The pulse may in general be considered as indicating the state of irritability of the living fibre."

"The pulse is full or small, in proportion to the quantity of blood circulating in the vessels; it is slow, quick, strong, or weak, in proportion to the vigour with which the heart contracts; hard or soft according to the tension and consequent resistance of the coats of the arteries. If the beating of the artery imparts a sensation similar to that of an elastic cord twitched under the fingers, whether slow or quick, the quantity of circulating blood may always be artificially diminished with safety and advantage.

"The organic pulse, not easily described in words, which Solano mentions, denotes the approaching crisis of disease, and is by him denominated the "lapis lydius Apollini." He also notices the pulsus myuris, or the creeping pulse, tapering away under the fingers like the tail of a rat, always an unfavourable symptom."

Dr. Buchan observes,

"In our inquiries concerning health, or the causes of disease, our attention should be particularly directed to ascertain the state of the various secretions, of the urine fæces, saliva."

"Clear limpid urine, exceeding the healthy quantity, is a diagnostic symptom of that class of diseases usually denominated nervous.

"In order to enable a person to examine the urine with propriety, a portion of that passed first in the morning after sleep should be set apart in a cylindrical glass vessel. When this vessel is held between the eye and the light, if a cloudy appearance be observed suspended toward the top, it has been termed nubes, or nubecula; if in the middle, enæorema; if at the botom, hypostasis.

"From the respective stations of these nubeculæ, much useful information was formerly supposed to be, and doubtless may be, derived. The hypostasis frequently indicates the crisis of fever, and a favourable termination of the disease. Small thread-like substances observed floating in the urine, are, in general, certain indications of recovery. Red particles adhering strongly to the sides of the containing vessel, which patients commonly denominate a red sand, generally indicate diseases of the liver. During a paroxysm of gout, the urine is commonly perfectly limpid, and deposits no sediment; but, with the decline of the fit, becomes extremely turbid, with copious deposits of flocculent matter. Such appearance encourages a hope, that some remedy may yet be discovered for this painful disease, as it appears to be connected with the suppression of some matter, that ought to be secreted from the system.

"Quantity of urine greatly augmented, accompanied with sweet odour and taste, indicates diabetes."

"Very important information, especially respecting the diseases of children, is to be derived from the inspection of the alvine discharges. Notwithstanding the old sarcasm, that "Fæces et urina sunt medicis prandia prima," no false delicacy or misplaced pride should deter a man, determined to discharge his professional duties conscientiously, from ascertaining, by the evidence of his senses, the real appearance of the fæces." 55.

Dr. Buchan now retrogrades a little to notice the appearance of the *tongue:*

"The condition of the stomach and alimentary canal, or the chylopoietic viscera, as they have been termed, are in general inferred from the appearance of the tongue, the inspection of which should never be omitted in the examination of a patient. When the tongue appears parched without thirst in fever, or is affected with a tremulous motion, it is an unfavourable symptom. When red and tremulous, it betokens the approach of diarrhœa. When extremely red in inflammatory sore throat, or pleurisy, it is symptomatic of danger. A thin dark-coloured pellicle, extending along the centre of the tongue, indicates, I think, the presence of hydrothorax.

"A foul, or loaded tongue, is commonly supposed to indicate the necessity of purgatives. In many instances, this is certainly the case. In that species of fever denominated gastric, or bilious, as it occurs in this country, the tongue is in general very much loaded; but under the action of frequent purging, I have observed this appearnce to increase; and if the evacuant system be persisted in, the patient sinks, and death ensues. This fact particularly demands the attention of the younger practitioner."

On *thirst*, and on the *appetite*, Dr. Buchan has the following notices:

"Thirst is symptomatic of indigestion, frequently a precursor of dropsy, although drinking freely of weak liquors is not, as is

thought a cause, but concomitant of that complaint. Deficient appetite accompanies, but does not cause fever. An unnatural craving for food is often the precursor of disease, especially of apoplexy.

"In chronic, and, indeed, often in acute diseases, an eager craving for food is frequently the precursor of death: this fact is so familiar to the common people of the North, that it is commonly called the *yeard hunger*. The immediate approach of death is frequently indicated by a strong propensity to exonerate the bowels, and sick persons often expire during the effort. I think I have observed several instances of death being accelerated by the injudicious exhibition of an irritating cathartic, in cases of extreme debility." 60.

In this place, our author quits the subject of symptomatology, and treats of the state of medicine in Egypt—of the Pythagorean philosophy—of the doctrine of critical days, and the power of numbers—of the influence of the moon—of the diurnal motion of the earth, &c. He then skips back to his original topic, and observes—

"Care should be taken to distinguish the rigor, which precedes the attack of fever, from that by which the commencement of internal suppuration or deposition of pus is indicated. Two instances have come within my knowledge, in which a practitioner was so far deceived by an access of rigor, as to prescribe an arsenical preparation for the cure of ague, which, in one case was symptomatic of suppuration of the testicle, and the other of lumbar abscess." —78.

Of the appearances of the *eye*, Dr. Buchan remarks—

"A yellow tinge of the cornea indicates some derangement of the organs subservient to the secretion of the bile.

"A dark blue or cerulean appearance of the same part, is a pathognomic symptom of diseased spleen. I discovered the certainty of this symptom in consequence of having an opportunity of seeing a number of men, who returned from the unfortunate expedition to Walcheren. In all of them this peculiar colour of the cornea was strikingly obvious. The bodies of almost all who died were examined, and in every case, the spleen was found diseased and enlarged, in some cases weighing not less than nine pounds.

"When the cornea appears of a pearly whiteness, accompanied with an expanded pupil, hollowness of the temples, the teeth generally sound, but with a bluish tinge, a tendency to phthisis pulmonalis may always be suspected.

"A peculiar bright sparkling appearance of the eyes, together with hurried and irregular motions of these organs, denote the approach of delirium or insanity. The presence of the latter disease is peculiarly indicated, according to the observations of Dr. Haslam, by a laxity of the integuments covering the occiput.

"A dull, prominent eye, betokens a propensity to apoplexy, as does also enlargement and fulness of the tongue. In advanced life,

this complaint is frequently produced by venous plethora; in such cases, blood-letting is by no means always indicated as a remedy.

"Distended pupils indicate diminished irritability.

"Thickness of the eye-lids and alæ nasi are symptomatic of the scrofulous diathesis. When this fulness of the eye-lids is accompanied with redness on the margins, caused by inflammation of the ducts of the sebacious glands, it generally betokens a propensity to over-indulgence in fermented or distilled liquors."

"Even the particular kind of intoxicating liquor to which a person is addicted, may frequently be surmised from the physiognomy. Indulgence in vinous potations produces turgidity of the eyes, and a dark red inclining to purple hue of the complexion.—Beer, a yellow bloated countenance, enlargement of the abdomen, and slowness of muscular action, well exemplified in the general condition of the draymen of London. Gin gives a leaden colour, deadness of the eye, emaciation, great depression of spirits, and diminution of muscular power. Brandy produces a peculiar ferocity of temper.

"I have been enabled to detect a secret attachment to the use of opium, a habit daily gaining ground in this country, from a peculiar, flaccid, greasy state of the skin, and a singular intolerance of light." 84.

Dr. Buchan again leaves the subject of symptomatology, and observes—

"It is the duty of the professors of medicine to investigate the nature of disease with a clear, unbiassed understanding, unprejudiced by theory, and influenced alone by a direct purpose to discover the truth. We ought carefully to be upon our guard against what Lord Bacon terms the *idolæ mentis*, the influence of which he considers as constituting one of the chief impediments to the advancement of human knowledge. An idola, or notion, may consist in referring every phenomena to some preconceived theory, which has obtained possession of the understanding. Some practitioners, for example, suppose, that in this climate every anomalous form of disease may be referred to a scrofulous diathesis.—Others, that all irregular constitutional complaints originate in a gouty disposition. When the nature of the venereal disease was not so well understood as at present, all undefined complaints were referred to some relics of that complaint lurking in the constitution. Boerhaave laid it down as a practical axiom, 'in dubio suspica luem.' Fifty years ago the diseases of persons of fashion were termed nervous; delicacy of the nervous system being, at that period, considered as indicating refinement of manners. In the days of Queen Elizabeth those slight irregularities of mind, which manifest their existence by oddity of manner, and complaints of unreal diseases, were attributed to deranged structure of the spleen." 93.

And further—

"It behoves medical men also to be upon their guard against wilful deception on the part of certain descriptions of patients.—

Such as attempts to conceal pregnancy, affectation of epileptic fits, and similar impostures." 97.

We cannot leave our author, without quoting the following feeling and amiable remarks:

"In the intercourse, which necessarily takes place between medical men and their fellow-creatures, when oppressed with sickness and with sorrow it may appear superfluous to recommend a due degree of attention to humanity of conduct. Indeed, in many instances of human suffering, a considerable share of resolution is required to enable us to discharge our professional duty with propriety. Our firmness should, however, be always blended with gentleness.

"As early as the age of Hippocrates, the propriety of observing a due decorum in the conduct of the physician was well understood, as may be observed in the elegant treatise of that ancient author, concerning the vesture and demeanor becoming the profession. Galen acquaints us, that with a view to compose his mind into a proper frame for the discharge of his professional duties, he used to repeat to himself, morning and evening, the golden verses of Pythagoras. Temperance and prudence are virtues essential to the medical character.

"Neither in the records of ancient Greece nor Rome do we find mention made of any charitable institution for the relief of the poor or the sick. The stern republicans of Rome sent their unfortunate slaves, when afflicted with hopeless sickness, to perish upon a desert island in the Tyber.

"The first hospital for the sick, of which any account has been preserved, was established at Jerusalem by a devout Christian lady, named Paulina, for the reception and relief of such pilgrims as became afflicted with sickness during their visit to the holy sepulchre."

"I have frequently doubted whether medical men were justified in upbraiding persons, who seek relief from public charities, with those aberrations from the paths of morality, which may have reduced them to distress. The poor and afflicted are in general sufficiently aware of their own misconduct; and interrogatories frequently elicit peevish and unsatisfactory replies, even to our best intended queries. A physician is not strictly speaking the moral, but the medical reformer of his patients. The 'sacer est miser' should be a maxim ever present to the mind of the officer of a public charity. The 'vultus quasi miserantis,' a countenance as if commiserating the frailties of human nature, attributed to the fathers of Soloman's House by Lord Bacon, in his new Atlantis, aptly denotes what ought to be the deportment of a physician." 106.

We have not space or inclination to notice the tables of symptoms. The volume is so small altogether, that we advise our junior readers to possess themselves of it. But we cannot recommend it on stronger terms.

This article cannot be better concluded than by a statement of the following sentiment of the late celebrated and lament-

ed Dr. Baillie, which he expressed to the writer of it, in the last interview which he had with that truly great man. Dr. Baillie observed, that the next real advancement in the science of physic would be made, when the symptoms of diseases should be studied with the same ardour and diligence with which the morbid anatomy had of late years been investigated. It is needless, after this, to multiply authorities; but we cannot resist the temptation of giving the following observation of the philosophic physician, Baglivi. "It is to be wished, I say, that some physicians, in all ages, had made it their business to pursue and improve the doctrine of signs: had that been done, questionless, the profession of physic had arrived at its acmé long ere now, at least, as far as our mortal state will allow." *Book* II. *Chap.* viii.

XI.

Observations on Acute Rheumatism, and its Metastasis to the Heart, &c. By THOMAS COX, M.D. Fellow of the Medical Society of London, &c. Octavo, pp. 65. London, 1824.

ACUTE Rheumatism is a far more dangerous disease than is generally imagined. We do not mean to say, that it is often fatal, *as external rheumatism;* but we mean to affirm, from long and attentive observation, that, *in its consequences*, it is productive of a very considerable proportion of those active enlargements, or hypertrophiæ of the heart, which we now so frequently meet in practice. This appears to be the opinion of Dr. COX, who, though a young man, has had considerable field for observation in the Borough hospitals, and other institutions of this metropolis.

"Had not many opportunities occurred to me, of witnessing the immediate and remote consequences of this disease, during a connexion of several years with Guy's Hospital, and other public institutions, I should not have ventured to take up the pen on the present occasion. The numerous cases of organic disease of the heart and pericardium, that were referable to, or connected with rheumatitis, first attracted my attention to the subject. The individuals suffering from such disease, are not only incapacitated from performing their ordinary duties with comfort to themselves, from the general derangement of the system which disease, in so important an organ, could not fail to induce; but the serious and irreparable mischief connected therewith, too frequently removes to a premature grave some of the most interesting members of society, who were, but a short time before, in the enjoyment of perfect health." *Preface*, vii.

It is Dr. Cox's object to draw the attention of his brethren to such judicious modes of treating acute rheumatism (or, as he terms it, and not, we think, inappropriately, *rheumatitis*) as may prevent or lessen these deplorable sequelæ of the disease. For this purpose, after a short description of the complaint, its causes, &c. he takes a brief review of the different remedies which have been employed in the cure of the affection.

I. *Venesection.* Of all acute inflammations, the rheumatic least imperiously demands blood-letting. This remedy, is carried, in general, a great deal too far, as we have had abundant opportunities of witnessing. Many practitioners think they can reduce the pain, swelling, and inflammation of rheumatic limbs, with the same facility, and by the same reiterations of venesection, as they would pleuritis. But they are generally foiled—and when they think themselves most triumphant, they have most endangered the future health and lives of their patients. By this ultra-depletion they may induce *immediate* retrocession of the disease to an internal organ, for there is no trifling relationship between rheumatism and gout—or what is more generally the case, they lay the foundation for a slow and *chronic affection* of the heart, which they afterwards consider as a new disease, totally unconnected with the rheumatitis.

Dr. Cox is an advocate for early and moderate venesection —and in this we agree with him, though we by no means consider venesection, in any degree, so essential to the cure of acute rheumatism as Dr. Cox appears to view it. The very circumstance of the disease being treated by many able physicians with bark, and successfully, proves that rheumatism is not a common phlogosis. Who ever treated successfully pneumonia or enteritis with bark?

"The inflammation, when confined to the joints, does not endanger life; consequently that promptitude of practice, so absolutely necessary in acute visceral inflammation, is not required; for we may, after the first bleeding, allow our patients to remain twenty-four or thirty-six hours with impunity. The mere existence of pain, however severe, will not always warrant a continuance of blood-letting; for it is observed that rheumatic inflammation, under every mode of treatment, will often run a certain course; it is, therefore, evident that the rash abstraction of blood would only debilitate and protract the cure." 21.

II. *Purgatives.* These should seldom be of the drastic kind; nor should hypercatharsis ever be induced.

III. *Diaphoretics.* These are favourite remedies, and certainly useful ones.

"The various remedies of this class it will be needless to enumerate. The *Pulv. Ipecac. Comp.* and a combination of *Submuriate of Mercury, Opium, and Antimony*, are two excellent forms and will seldom fail; more especially if aided by the free use of *Tepid Diluents*, which are strongly recommended by Sydenham and others." 24.

IV. *Colchicum.* This is a powerful auxiliary in rheumatism. We doubt whether it is safe to quickly arrest the progress of this disease by colchicum, in large doses, where there is any weak organ internally. We apprehend that, in such cases, the same reasonings will apply as in the treatment of gout.—There can be no objection, however, when metastasis of rheumatism has produced disease of an internal organ, to the moderate employment of colchicum, although it might be improper in the open and developed forms of the complaint.

At page 39, Dr. Cox comes to the subject of metastasis to the heart, and gives a rapid sketch of its history, which as our readers well know, is only of recent date. He thinks, that "the majority of cases of organic disease of the heart in young people, are connected with rheumatism"—and perhaps the period might be extended beyond that of youth.

In respect to the post mortem appearances and the treatment of rheumatic metastasis, Dr. Cox does not present any thing novel. Of the cases brought forward in illustration, we shall introduce the following.

"*December* 22, 1822.

"William Brown, æt. 20, was attacked four days ago, after exposure to wet and cold, with febrile symptoms, soon followed by acute pains in several of the joints, which are at present very severe, with pain in the region of the heart: respiration, hurried and anxious; palpitation considerable; countenance distressed; cough frequent, loose, and painful; pulse 120, strong, hard, and contracted; tongue white; much thirst; bowels constipated.

Sit V.S. ad ℥xvj statim.
Cap. Inf. Sennæ et Magn. Sulph. 2da q.q.
h. donec alv. purg. et postea
Tinct. Digit. ♏x 4ta q.q. h. ex Inf. Rosæ.

"23d—No relief by bleeding; blood buffed; symptoms nearly the same:

Rep. V.S. ad ℥xij, et Digit. ut antea.

"24th—Bleeding gave temporary relief only to pain of chest; joints somewhat easier; pulse 126, jirking.

Rep. Digit.

℞ Hydr. Submur. gr. iij.
Antim. Tartar. gr. ½.
Opii gr. j. ft. Pil. h. s. s.
Cuc. Cr. ad ℥x reg. cordis.

"25th—Pain in left side of chest less acute; anxiety of countenance and distress in breathing the same; makes but little complaint of joints; pulse as yesterday.

Appr. Hirudines. xij lat. sinist. et Emp.
Lyttæ postea.
Intermitt. Med.
Sumt. Ext. Conii gr. v. c Ipecac. gr. j.
8° ter die.

"This lad lived till Jan. 8th, without any abatement to his sufferings, and towards the close the anxiety of countenance and distress in breathing were considerable.

"*Dissection.*—A honey-comb deposite on the heart and inner surface of the pericardium, with a few bands of adhesive matter attaching these parts together: a few ounces of very turbid serum were contained in the pericardium, with flakes of lymph floating in it. Heart itself not enlarged nor altered in structure." 57.

The following is a case of metastasis to the brain—a translation not so common as to other parts of the body.

"Mr. S. æt. 25, after exposure to cold, in October last was attacked with acute rheumatism. The pains of the ankles and wrists were so exceedingly distressing as to induce the surgeon to apply leeches, the result of which was almost immediate relief; at the same time he took a brisk purgative, and subsequently diaphoretics.

"About twenty-four hours after the application of the leeches, I first saw this gentleman, at which time he complained much of a sense of weight in the head, and some impatience of light and sound, accompanied with a wild anxious expression of countenance, occasional rambling, strabismus, and impaired vision; pulse 110, hard and full; tongue whitish and moist; skin soft, with some perspiration.

"From the history of this patient, more particularly in reference to the mode of treatment, I was disposed to consider it a case of metastasis to the brain, although the mental faculties were unimpaired, and no decided delirium accompanied it.

"With this persuasion, I proposed a full bleeding from the arm (sixteen ounces,) and the exhibition of five grains of submuriate of mercury, succeeded immediately by senna and salts, until several copious evacuations were produced. We also agreed on the application of leeches to the temples, and cold lotion to the shaved head, in the evening, provided the symptoms did not materially subside.

"The symptoms continuing at night, the measures agreed upon were pursued.

"On the following morning, the only alteration in the symptoms

was a diminution in the impatience of light and sound. The blood drawn yesterday was much buffed and cupped.

"A repetition of venesection, to ℥xij, and purgative medicines were prescribed. with a perseverance in the cold lotion.

"In the evening, the bleeding was repeated to ℥x; from the highly inflammatory character of the blood drawn in the morning, and from symptoms remaining which indicated that mischief was still going on. On the next (third) day, the bleeding was repeated to twelve ounces, and eight ounces were drawn on the fifth day.

"The blood, to the last, exhibited signs of inflammation; after this, by keeping up a constant action on the bowels, the head affection was gradually subdued, and on the 8th day from its appearance had entirely subsided." 61.

The following is an example of pericarditis.

"Thomas Cope, æt. 27, had laboured under a severe stricture of the urethra, with fistulous openings in the perineum, for several years, which had been much relieved by the use of sounds, &c. afterwards an operation was performed for the cure of the fistulæ, Nov. 27, 1823, the result of which was in every respect satisfactory. On Dec. 19, he was suddenly attacked with pain in the epigastrium, increased by pressure and a full inspiration; pulse 90, rather oppressed and contracted, accompanied with an anxious expression of countenance; hurried respiration, and occasional vomiting; tongue dry, and red in centre; bowels open.

Sit. V.S. ad ℥xij statim.

℞ Hyd. Submur. gr. j.
Opii Extract. gr. j ft.
Pil. 6ta q.q. h. sumend.

"20th—Blood much buffed and cupped—tongue universally brown and dry—pulse 100, hard and contracted—makes very little complaint of pain—anxiety of countenance increased—almost constant nausea.

Rep. V.S. ad ℥xij.

"On the evening of the 21st, there was considerable intermission and irregularity in the pulse, and he was in every respect much worse and decidedly sinking.

23d—Died early this morning.

"*Dissection.*—The investing and reflected portions of the pericardium were covered with adhesive matter, and flakes of lymph floated in about three ounces of turbid serum contained in the pericardium; substance of the heart healthy; no valvular disease; *liver* much indurated and granular, and it had contracted adhesions to the neighbouring parts, which were firm, and consequently of long standing." 65.

Dr. Cox's observations are generally judicious, but the work presents no novel or striking views of the etiology, pathology, or treatment, of the disease forming the subject of investigation.

Quarterly Periscope

OF

PRACTICAL MEDICINE;

BEING

The Spirit of the Medical Journals,

Foreign and Domestic;

WITH COMMENTARIES.

I.

Physiology.

——————— latas à numine leges
Religiosa doce, mentesque cupidine veri
Allice.

1. *On Vital Power, or Individual Idiosyncrasy.** M. Martinet justly observes, that too much importance is attached to *post-mortem* appearances, and too little account is taken of individual idiosyncrasy. Thus, we see some people die, and yet the organic lesion found, on dissection, is not at all calculated to account for the fatal event. By vital power, or *resistance*, (as Martinet terms it) our author does not mean the energy of functions, nor the excess of irritability or activity in a given individual—nor yet that harmonious balance of the different systems of the body, which is designated a *good constitution*. By vital resistance, he means that power, by virtue of which a man supports, without much inconvenience, the action of those causes which have a tendency to destroy him—a power which may exist in the highest degree in individuals of the weakest, as well as in those of apparently the strongest constitutions—in those who are irritable, as well as in those who are placable. In the difference of degree, then, of this vital power of resistance, we may find some clew for reconciling certain contrarieties of opinion that divide the medical world. It may tend to bring into accordance those physicians who maintain that, in fevers, death is the result of a local lesion, and those who, on the other hand, believe that death does not depend on the actual state of particular organs (which often present no trace of disease)—and

* Sur les differens Degrés de Resistance Vitale dans les Maladies, deduites des rapports des lesions organiques, avec leurs effêts. Par L. Martinet, M. D. Revue Medicale, Octobre, 1824.

maintain that we cannot regard a slight redness of the cerebral meninges, of the pleura, or of the stomach, as the sole cause of the fatal event, when we every day see much greater lesions of structure, in other individuals, attended with comparatively trifling disturbance of function. In order to throw some light on this subject, let us advert to certain phenomena which are constantly presenting themselves to our senses. Let us take *sensibility*, for example, as manifested in the cutaneous surface. In one person, the prick of a needle or other sharp instrument will produce but a slight momentary pain—in another, exquisite suffering—in a third, syncope—in a fourth, tetanus;—yet, in all these, the local effects will be precisely the same; namely, a slight inflammatory areola round the puncture. Whence can proceed these various effects, but from diversity of individual disposition—in other words, idiosyncrasy?

If, from the cutaneous sensibility, we pass on to the propensities or aptitudes to contract such and such diseases, we shall find an infinite diversity in individuals. Some people will be exposed to a focus of infection, for days and weeks, with impunity; while others, of apparently similar constitutions, soon fall victims to the deleterious miasms. It is not robustness of constitution, nor equanimity of mind which resists the contagion—but often the very reverse. And this is not only the case with small-pox, typhus, and plague—the same observations will apply to diseases which are caused or propagated in other and different modes. Every day we see blows on the head—suppressions of perspiration by cold—excesses in eating or drinking, borne with little or no sensible effects, by some people—while, in others, the slightest concussion—the least excesses in exercise, eating or drinking, will be followed by violent inflammations of the head, chest, or digestive apparatus. What, but idiosyncrasy, can account for these differences of result? Again, let us look at these individuals when actually affected with diseases. Some get well in a few days—others linger a long time under the same affection, and a third party are quickly cut off and perish—the malady appearing of the same nature in all. Nor is it the intensity of the disease, or the extent of the inflammation, which can explain these differences. Take pneumonia, for example:—in some people, who die, a small portion only of one lobe will be inflamed—in others, almost the whole of both lobes will be phlogosed, and yet they will speedily recover. In these last, the vital resistance is superior to the disease—in the former class, it is inferior. Now, as it is quite impossible to say, in the beginning of a disease, whether or not the degree of vital power is equal to overcome the malady, since there are no marks of external form or internal function by which it can be known—so the science of prognosis is proverbially fallible, and, it is to be feared, will ever remain so! A history of the individual's habits, former ailments, and peculiarities of disposition, is the only document on which we can place any confidence—but how imperfectly is this investigated by the routine practitioner, and the fashionable physician!

ILLUSTRATIONS.

Case 1. Tellier, 32 years of age, of robust constitution, and athletic frame, and who had previously enjoyed good health, was affected a fortnight ago, with a diarrhœa, which only lasted 24 hours, and ceased without medicine. From this time, he was in good health, till the night of the 5th of March, 1824, when he was seized with violent cholic and diarrhœa. *6th.* Though feeble and fatigued, he went out; but finding himself unable to work before breakfast, he took a small quantity of brandy at seven o'clock in the morning. He had scarcely swallowed it, when he became faint, and was obliged to retire to bed. Vomiting and purging now came on, which lasted all that day and succeeding night. The matters ejected, both by vomiting and purging, were colourless, but accompanied by acute pains in the abdomen, anxiety, and restlessness. By the advice of a physician, the patient confined himself to the use of lemonade (a curious prescription for vomiting, griping, and purging!) On the morning of the 7th, he was carried to the Hotel Dieu. The vomiting and purging had nearly ceased, but what passed was of a green colour. Carefully examined, he now presented the following symptoms:—great prostration of strength—lies on his back—eyes hollow and fixed—face pale, and features greatly changed—answers with difficulty to questions—complains of pain only in his throat—but there was tenderness on pressure at the epigastrium—thirst—frequent eructation—vomiting every quarter of an hour, of a greenish fluid—tongue coated yellow—abdomen tense—pulse imperceptible at the wrist, but the stethoscope made the cardiac pulsations 80 in the minute—skin dry—heat natural on the trunk, but the extremities cold. In this state, he lingered out till ten o'clock in the evening of the 8th.

Dissection. The vessels of the meninges of the brain slightly injected—brain itself natural—lungs sound and crepitous—nothing wrong in this quarter. *Abdomen.* Stomach pale externally—the pyloric half of the mucous membrane exhibited a rosy tint, when washed, but no other alteration—duodenum empty, and its mucous lining of a yellowish colour—no alteration in the upper portion of the small intestines, but, towards their middle, they exhibited a violet tinge for nearly two feet in extent, externally, while the corresponding portion of mucous membrane was of a vivid red colour, particularly about the valvulæ conniventes—lower portion of ileum contracted, and its mucous membrane inflamed, with streaks of white, apparently produced by a purulent infiltration into the sub-mucous cellular tissue. The large intestines, the liver, and other abdominal organs were in a natural condition.

Remarks. It is quite evident that the quantum of inflammation found in this case, bears no proportion to the violence of the symptoms, and the suddenness of the fatality—especially when we find the patient in the prime of life, and of an excellent constitution. The case proves that, notwithstanding all this, the disturbance induced in the vital functions by so slight a phlogosis, was yet greater than the vital power of resistance, and consequently death was the result. From this and other cases, we may reasonably infer that,

in certain constitutions or idiosyncrasies, a disorder of a vital part, or parts, may be so slight as scarcely to leave a trace of its existence, *post mortem*, and yet be quite sufficient to destroy the life of the individual. This appears to be exemplified in the following instance.

Case 2. A girl, 16 years of age, having been affected with severe cephalalgia for a fortnight, entered the Hotel Dieu, on the 16th December, 1823. On the 17th, she presented the following symptoms;—intellectual functions free—severe pain of head in the vertex and forehead—tongue moist and not red—a little whitish at the base—abdomen not sensible to pressure, and of the natural temperature—respiration free, and the respiratory sound audible in every part of the thorax—pulse natural—lies across the bed. With the exception of this last symptom, which was attributed to whim and the head-ache, the young patient presented no tangible symptom of disease. Some opening medicine was prescribed by M. Recamier, with pediluvia. 18th. Same state—no fever—head-ache continues. Fifteen leeches behind the ears—pediluvia—lemonade. 19th. The epigastrium a little sensible to pressure—an expression of stupor about the countenance—the pulse a little accelerated and full—head-ache the same—tongue white, but moist. In the evening, a *smart fever* rose, and continued for some hours, when the patient suddenly expired.

Dissection. Body rather embonpoint—tunica arachnoidea transparent and perfectly natural—no injection of the pia mater—no congestion of vessels—only a few drops of fluid in the ventricles—no traces of alteration in the brain, cerebellum, or medulla oblongata—lungs crepitous and sound—in short, there was no vestige of disease in any part of the body.

Remarks. It cannot be said that this girl died of inflammation of the brain, its membranes, or any other structure in the body. Yet fever was unequivocally established before death. The head appears to have been the seat of the disease; but there is no proof of actual phlogosis, at least, in the vascular system of the parts. The sensibility merely seems to have been engaged—but the disorder of the sentient system was, in this case, sufficient to destroy life, before any tangible or visible change in the structure of the parts took place. Thus, we see, also, that any excessive affection of the sentient system may, in certain individuals, prove fatal, and that very suddenly, whether the impression be of a painful or of an agreeable nature. Sudden joy, sudden fear, excruciating pain, have quickly extinguished vitality—so frail is the tenure of life!

Case 3. A man, 38 years of age, was received into the Hotel Dieu, in January 1824, complaining of slight pains in his loins, with some looseness of bowels. Lavements—diluents. In the course of a few days, the pains, which had never been accompanied by any pyrexia, disappeared—the patient began to take food, and

was considered convalescent. One day he complained, at the medical visit, of general *malaise*, and that his appetite had left him. His pulse and respiration were natural. The physician thought it unnecessary to order him any medicine. In ten minutes afterwards, he appeared in great agitation, and a prey to some severe suffering. His intellectual functions were in perfect integrity. He complained that his belly felt tense and swelled, although it felt soft and natural to the hand of another person—he said he felt his breathing difficult, although the chest sounded well in every direction, and the respiratory murmur was every where heard by means of the stethoscope. The features, however, altered more and more—the pulse acquired frequency—he felt inclination to vomit—he began to cough—he had thirst—and he expectorated five or six ounces of a whitish glairy fluid streaked with blood. Relieved by this expectoration, the patient got up to go to the water-closet, but not being able to discharge any thing, he returned to his bed, without assistance. In a few minutes he expired—not quite an hour from the first invasion of the symptoms above described.

Dissection. The brain and its membranes, examined with the greatest care, offered no trace of congestion, no redness, no sensible deviation from that of health. The lungs were perfectly sound and crepitous. A few drachms of clear liquid were seen in each cavity of the pleura—and the same in the pericardium, which, with the heart, was sound in structure. The peritoneum was healthy, but there were full 16 ounces of clear serum in its cavity. The intestinal tube, throughout its whole extent, was colourless—its mucous lining pale. There was no appreciable alteration in any of the other viscera or parts of the body, besides the serous effusion above-mentioned.

The following case will be found still more extraordinary.—

Case 4. Rosina Choisi, 20 years of age, of lymphatic temperament, entered the Hotel Dieu, on the 29th of January 1822, in a state of considerable moral depression, and from whom no satisfactory information could be obtained, although she appeared perfectly sensible of the questions put to her. On examination next day, (30th January) she presented the following phenomena: abdomen tense and painful on pressure—tongue dry, and covered with a black crust, as were the teeth and lips—continual moaning, and complaint of acute pain—inability to reply to questions asked—pulse small, hard, and quick—extreme prostration of strength—breathing free. *Forty leeches to the abdomen—fomentations—emulsions—lavements.* 31st. Tongue not quite so dry—abdomen still very painful, especially on the right side. In other respects, the same. 20 *leeches to the painful parts—semicupia—lavements.*—*Feb.* 1. The tongue is becoming moist and cleaning a little—but the features are sunk and greatly altered—belly still very painful—no alvine evacuation since her entry into the hospital—pulse scarcely perceptible. *Twenty leeches to the abdomen.* 2nd. Tongue again dry—belly still tense, and painful—the pulse is perceptible and very rapid—prostration extreme. *Twenty leeches to the abdo-*

men. 3rd. diminution of the abdominal pain, but not of the tension and swelling—tongue a little moist—pulse quick and feeble. 4th and 5th. The symptoms rather mitigated than otherwise. 6th. Vomiting has supervened—great agitation and delirium—abdominal pain and fever augmented. *Blisters, semicupia, fomentations, &c.* 7th and 8th. Increase of prostration—constant delirium and restlessness. *Camphor, ether, &c.* 9th. Died this day.

Dissection. A most minute examination was made, and not a trace of morbid structure or alteration of any kind could be detected in the brain or its envelopes, in the chest, or in the abdominal viscera.

Remarks. This female was treated for peritoneal inflammation, and it cannot be denied that she presented the principal phenomena of that phlogosis. It is possible, too, that such an inflammation did exist, but that the extreme depletion by leeches dissipated it. We are doubtful, indeed, whether depletion was not carried too far in this case, and whether the patient did not die of the typhoid fever accompanying the phlogosis (if it did really exist) together with the immense loss of blood by leeching. Twenty leeches applied to the abdomen, when the pulse was scarcely perceptible at the wrist, was what the phlebotomising Englishman would hardly have ventured on, although he is ridiculed on the Continent for his ultra-depletory operations.

Case. 5. Marianne, aged 34 years, had been irregular in menstruation from the age of thirteen to twenty-four—during which period she suffered from various anomolous affections. From this time till the age of 33, she was regular and healthy. At the latter epoch, she again became irregular, and her health deranged. The most prominent feature of her complaint was now hæmaturia. The lower extremities became œdematous, but were reduced by bandaging. The hæmaturia diminished, and menstruation again appeared. At this period, a pain fixed itself in the epigastrium, was increased after food—was often accompanied by nausea and vomiting, with occasional dyspnœa. These symptoms increasing, the patient entered L'HOTEL DIEU in the month of April 1824, where she staid only ten days, still complaining of the above mentioned symptoms. Emetics—leeches—bark—assafœtida—baths, had no good effect, and she left the hospital unrelieved of the complaint, which was unaccompanied by pyrexia. On the 3rd of June, same year, she returned, and now complained of a sense of constriction in the chest, difficulty of breathing, slight head-ache, vertigo, suffusion of the eyes, thirst, inappetency, white tongue, severe pain in epigastrio, on the least pressure, constipation, full pulse, some heat of skin. *Ptisans, lavements, baths.* On the 4th and 5th, the pectoral symptoms were relieved, but she fainted each time she came out of the bath. The epigastric pain continued undiminished. On the 6th, she died in an attack of lypothymia.

Dissection. There was a slight serous infiltration between the membranes of the brain. The vessels of the pia mater were injected—the right hemisphere of the brain rather soft. The

lungs were sound—the mucous membrane of the bronchia red in some points—heart enlarged, and very soft—left ventricle dilated very much, but without diminution of its parietes. The mucous membrane of the stomach was of a dark brown colour, and softened for a considerable space. The small intestines were red in several places, the mucous membranes corresponding with these places being covered with a whitish, purulent matter. Large intestines sound—liver granulated and very hard—spleen gorged with black blood.

Reflections. M. Martinet observes, that the appearances on dissection, in this case, were far from proportionate to the symptoms and suddenly fatal termination. Indeed, we can hardly look upon the disease as a "*gastroenterite*" at all. We think the head and heart were the principal foci of disease, and that the pain in the epigastrium was sympathetic or nervous, rather than inflammatory. The softening of one hemisphere of the brain was a formidable item.

Case 6. A man, 36 years of age, who had enjoyed good health, and who had all the appearances of health of constitution, was seized, on the 2nd October, while in the street, with an apparent epilepsy. On the 3rd, he was carried to the Hotel Dieu, in general convulsions, with loss of sense. He was immediately bled. 4th. The intellectual functions completely restored—sensibility natural. Professor Recamier only prescribed a ptisan. 5th. The same—appeared remarkably well. In the night of the 5th, he had furious delirium. 6th. Monomaniac delirium, the patient being persuaded that he was poisoned, and that he had but a few hours to live. There was no fever—no disturbance of any of the visceral functions—judgment perfectly correct on every other subject. *Sinapisms to the feet—diluents.* Under the firm conviction that the attendants were employed to administer poison, he refused all drink, and suddenly and unexpectedly expired in the evening.

Dissection. Body in a state of embonpoint. In the head, the tunica arachnoidea, to a great extent, was opake and thickened. The meninges covering the cerebellum were also thickened and opake. The pia mater was strongly injected—the brain was rather less firm than natural, and on its surface were numerous red spots, which could not be removed by washing. The vessels of the tuber annulare were exceedingly injected. The lining membrane of the heart and large vessels was of a crimson colour. The mucous membrane of the stomach was somewhat softened towards the pyloric orifice, and reddened in those places. Some marks of phlogosis in the duodenum. No other morbid appearance.

Remarks. M. Martinet observes that, were it not for fear of extending this Memoir too far, he would here take an opportunity of stating a series of cases of an opposite kind, where patients had carried on a protracted existence, under organic lesions of great

extent and intensity, and yet with far less disturbance of functions than in the above patients, where the organic lesions were comparatively trifling. Such cases, however, are very familiar to every pathologist. Indeed, it is manifest, that a person corporeally enfeebled by antecedent illness, is often more capable of bearing up under organic diseases than a robust person who is, for the first time, taken ill with an acute disease. Upon the whole, M. Martinet thinks himself justified in drawing the following conclusions.

"1mo. That the vital power or resistance differs in different individuals, and that the exterior aspect of the body, the constitution, and the temperament, are but feeble indices of this power—hence the fallacy of prognosis.

"2ndo. That it is by no means necessary that an inflammation should be intense in order to destroy life, if the power of resistance be of low rate in the individual.

"3tio That death may take place without any appreciable mark of organic change being left, post mortem—while, in other cases, according to the degree of vital power—life may subsist under organic changes of the most profound and extensive kind.

"4to. That it is in the medical history of each individual (or in other words, an investigation of idiosyncrasy) that the physician will obtain the best data on which to ground his prognosis."

We are of opinion that there are many useful hints and just reasonings in M. Martinet's paper, and that the subject is one of very great interest to the medical practitioner.

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2. *Resuscitation.** Our readers are aware that some discrepancy of opinion prevails, respecting the *power* which we possess of restoring suspended animation. If we are to believe the accounts transmitted to the Humane Society, there would seem to be scarcely any limits to this power, in respect to the period which elapses between suspension and restoration of the vital phenomena. Mr. Brodie and some others in this country, on the other hand, are very sceptical respecting the said power of resuscitation, after the cessation of the heart's action, which they suppose (from experiments on animals) cannot continue more than a few minutes after the respiratory function ceases. We confess that, from what we have actually seen of these resuscitations and attempts at resuscitation (which have been not a few) we are led to the same views as are entertained by Dr. Paris and Mr. Brodie. Our contemporaries of the North are of a different opinion, and they have published an analysis of Dr. Roesler's thesis in support of their opinion. Of this analysis we shall present the prominent features, being desirous that the means of saving human life should neither be depreciated not rated too highly.

* D. Roesler's Inaugural Dissertation, Tubingen, 1824—*Ed. Journal No.* 82.

The first inquiry instituted by Dr. Roesler was to determine whether, in death by submersion, the air passages are really obstructed by mucus and water—a subject which has occasioned much controversy. The result of 45 experiments made by Dr. R. was, that in every instance a very small quantity of frothy mucus might be seen about the bifurcation of the trachea—but no water whatever—the quantity of mucus being wholly insufficient to produce the slightest obstacle to artificial inflation of the lungs. The attempt at washing out the mucus by means of warm water was not merely useless, but injurious. Not so the following :

"This process was instituted, in order to determine the average number of recoveries by the inflation of temperate air, and the longest period of submersion after which animation might be restored,—with the view of afterwards comparing with these *data* the corresponding results obtained with heated air. The plan pursued was the following. As soon as the animal was removed from the water, it was carefully dried, laid in a warm, but well ventilated place, and rubbed, and finally swathed in flannel. The artificial inflation was then immediately begun, and was continued for half an hour or three quarters of an hour ; after which, if no signs of resuscitation appeared, it was abandoned. At the same time, the frictions were frequently resumed, the body was kept well warmed, and as soon as any sign of returning life appeared, stimulants were introduced into the stomach. The only important particular which has been omitted in his description is the number of inflations ; but as far as can be gathered from the details of the experiments, they appear to have been about 20 per minute." 209.

The average number of recoveries was 3 to 8. And next comes the great question as to the period of submersion. We have already stated the opinion of Mr. Brodie and Dr. Paris. It may be, that the latter author has thrown too much of an air of ridicule over a grave subject, by comparing the stories of divers, and the reports from humane societies, with the ancient tales respecting "the nymphs and mermaids whose residence is in grottoes beneath the waves of the sea." But on the other hand, our northern cotemporaries are forced to admit "that the reports which have emanated from humane societies, and various other quarters, are too sanguine in their expectations of success in cases of long-continued submersion." The first train of experiments were three in number—two on rabbits and one on a cat. The periods of submersion were $5\frac{3}{4}$, $9\frac{1}{2}$ and $11\frac{3}{4}$ minutes, and in all the three cases, resuscitation was effected. But, *audi alteram partem.* "He several times failed when the animals were taken out of the water instantly after they seemed to have expired." It appears to us, therefore, that as the above three experiments were the only ones our cotemporaries could select out of 45, which were at all in support of their doctrines, they have very little indeed to boast of, granting that no fallacy crept in, or no colouring was given to the said experiments—fallacies and colourings which they themselves acknowledge to have often disfigured reports in this country, and

which may (without prejudice be it spoken) occur in the reports of men in other climates also.

A part of the investigation relates to the relative value of cool and warm air in the treatment of suspended animation. The results appear favourable to the employment of heated air for the inflation of the lungs—"but enough has not been done to determine its precise value."

We have only one more observation to make on this subject, namely, that men are not cats or rabbits. Experiments on the inferior animals will rarely apply to the human species. We have seen rabbits digest a good belly-full of parsley with both par vagums cut, and streams of electricity passing constantly along the nerves. But how would such an experiment succeed in man?

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3. *Etiology of Goitre.** Dr. Drug, who practised some time at Matlock bath, Derbyshire, conceives that he has discovered the cause of goitrous affection—namely, *sour oat-cake*, aided by other innutritious diet, as inferior potatoes, &c. We apprehend that this is a very limited view of goitre and cretinism. We observe the former more abundant in some than in other parts of Switzerland, though the diet is the same: for instance, in the valley of the Rhone we see hardly any thing else than cretins and goitres, while in the valley of Chamouny, separated only by the *Col de Balme* from the other valley, we see very few of either diseases. This contrast must arise, therefore, from something in the air or water, or both—for the food and mode of living are the same. Moreover, we trace bronchocele along the whole course of the Rhine, from Schaufhausen to Cologne, its frequency gradually and progressively decreasing as we descend that magnificent stream. What can this be owing to? For our own parts, after viewing with no inattentive eye, the moral and physical conditions of those inhabitants of the Alpine regions where cretinism and bronchocele abound, we have come to the conclusion that one of the main causes of bronchocele especially is to be found in the *water*, however much this cause may have been scouted by some medical and scientific travellers. We do not mean to say that it is the *snow-water* which has any thing to do with the complaint. But who can tell the thousand matters with which the Alpine waters are impregnated?—Every stream, great and small, that takes its origin from the glaciers, and other elevated crusts of ice or snow, becomes, in a short time, perfectly *white* with the particles which it wears from off every rock and mineral substance, in its noisy and precipitous route to the lakes below. Hence, a bottle of water taken from any of these streams, lets fall, on standing, a prodigious deposit of earthy and saline or mineral substances. When we consider the infinite variety of materials constituting the beds and banks of these Alpine streams, and see the quantity of *attritus* which they carry with them, and which are swallowed by the inhabitants, we can

* Dr. Thomas Drug. Med. and Phy. Journal, January, 1825.

have very little doubt that such ingredients have no trifling influence on the physical organization of man. This supposition is strengthened by the fact which we have just mentioned, that bronchocele gradually and progressively decreases, as we descend the Rhine—a river that rises in, and is chiefly supplied by, Alpine waters. It is hardly necessary to observe that, as the river increases its distance from the Alps, it lets fall the matters with which it was impregnated, as well as becomes mixed with auxiliary streams from countries not Alpine. This change is remarkable also in the Rhone. The upper Rhone, where it falls into the lake of Geneva, is turbid even to whiteness; but its waters, while nearly quiescent, in the lake, become clear, and pass through the city of Geneva like translucent streams of bluish crystal. Among those who inhabit the banks and drink the waters of the upper or turbid Rhone, (namely in the Vallais) there are twenty cretins and goitres, for one that can be seen on the banks of the lower or filtered Rhone, in its progress to the Mediterranean. Although we do not contend that *all* this difference is owing to the change in the waters; yet, taken in connexion with the Rhine, we think it forms a strong ground of presumption in favour of the goitrifactive (if we may use such expression) influence of Alpine waters. That the cause of bronchocele cannot be traced to sour bread, or indeed to any particular article of diet (the water excepted) at least in Switzerland, is proved by the fact, that English children (who live as well as people in England, cannot be kept long at Geneva, or in any other part of Switzerland, without having enlargements of the thyroid gland. This fact is well known to those English families who sojourn in that romantic country.

But it may be asked, can the waters in Derbyshire, or other goitrous counties in England, be the cause of bronchocele? We may answer, that it is much more probable that the cause of the disease should reside in the earth than in the air—and if in the *former*, surely the water which we drink is the most likely vehicle for its conveyance into the constitution. There is a mineral or saline substance in nature which is capable of removing the swelling of a thyroid gland—for instance iodine;—and why should there not be another saline or mineral substance which is capable of producing the said swelling?—The same valley which issues forth the miasma that causes ague, gives birth to the tree that furnishes the quinine, which cures the disease.

When on this subject, we may remark that, from an attentive survey of the Alpine valleys, it appeared to us that cretinism and bronchocele were only two prominent features of one great physical and intellectual deterioration which pervades the inhabitants of scenes the most romantic, sublime, and beautiful that human eye has ever yet beheld. It is not the swelled neck, the enormous head, and the vacuity of mind alone, that arrest our attention in traversing the Alpine regions. The whole corporeal fabric, with all its intellectual prerogatives, is stunted, deformed—and, as it were, aborted! Well might Goldsmith say—

"Man is the only plant that dwindles here."

Every feature and phenomenon of Nature around is wild, grand, and impressive—while he who is master of the whole, and the alleged image of his Creator, is an abomination to the sight.

II.

PATHOLOGY.

Actio læsa suum designat singula morbum;
Prætereà morbum partis mutatio signat.

1. *Mortal Dyspnœa.** As pathology has made progress, the number of dyspnœas, said to be nervous, spasmodic, or unattended by any appreciable lesion of structure, have greatly diminished. But, although the greater number of asthmas can be traced to organic disease of either the vascular or respiratory systems, there are still cases where the cause of dyspnœa eludes the eye and scalpel of the anatomist.

Case 1. A baker, 20 years of age, of strong constitution, and resident in Paris only two months, became affected, five or six weeks before the date of this report, with a slight diarrhœa, which continued till the 10th of April, when he was seized with the precursory symptoms of measles. On the 14th, the eruption came out—and, on the 15th. it had covered the whole body. He was admitted into LA CHARITE in the evening of that day. The pulse was hard—the tongue and lips red—the cough severe, and, in short, the symptoms very alarming. Towards the middle of the night he experienced a sudden oppression about the chest, which augmented rapidly, and, on the morning of the 16th, he was found by the physicians in a state of demi-asphyxia—the eyes prominent, the face purple, the breathing short and difficult, cough incessant, scanty mucous expectoration. The chest sounded well, on percussion, throughout every part, and the stethoscope exhibited the "mucous rattle" in various points. The eruption had vanished, with the exception of a few pale spots. The pulse was quick and hard, the tongue red. This train of symptoms seemed to indicate pneumonia, but the *pathognomonic signs* of this inflammation were entirely wanting. "Could simple bronchitis of an extremely acute character and sudden rise, occasion such a severe state of dyspnœa? Could this phlegmasia, joined to phlegmasia of the mucous membrane of the alimentary canal, explain the state of extreme danger into which this patient had so suddenly fallen?" In whatever way these questions may be answered, says M. Andral, the indications to be pursued were not doubtful. The internal inflammation was to be reduced—and the eruption on the skin was to be restored, if

* Andral Jun. Recueillie à l'Hopital de la Charité.—Revue Med. Sept. 1824.

possible. Twenty leeches to each side of the chest, and ten to the epigastrium—a blister to the inside of each leg—skin rubbed with ammoniacal embrocation. A great degree of relief followed these measures. In the evening, the breathing was much less oppressed—the cough less frequent—the tongue not so red—but the eruption was not restored. 17th. The symptoms of intense bronchitis, with proportionate fever, were still in existence. The breathing was but little accelerated. 18th. The fever almost subsided—and the opake appearance of the expectoration announced a favourable termination of the bronchitis. All at once, this evening, the breathing became greatly oppressed—and twelve ounces of blood were taken from the arm. 19th. The dyspnœa was still great—the pulse quicker. During the whole of this day the suffocation augmented more and more. 20th. Livor of the face and lips—shrinking of all external parts—death.

Dissection. The mucous membrane of the larynx, trachea, and bronchia, to their minutest ramifications, was of an intensely red colour. In some portions of the first divisions of the bronchia, there were appearances of incipient false membranes, similar to those of croup. The parenchymatous structure of the lungs was sound and crepitous throughout. Heart sound. The mucous membrane of the stomach and bowels was natural, with the exception of a red patch near the valve of the colon. The liver was gorged with blood—the spleen large and firm. There was considerable serous effusion under the tunica arachnoidea—but the substance of the brain was not injected—considerable effusion of serum into both ventricles.

We cannot participate in M. Andral's astonishment at the fatal termination of this case without organic disease of the parenchymatous structure of the lungs. Such an intense bronchial inflammation, as here presented itself, was quite sufficient to cause death. It is also to be remembered that those internal inflammations, succeeding repelled measels, are always more dangerous than inflammations of the same organs under common circumstances. We do not exactly understand why M. Andral should place the case in question under the head of mortal dyspnœa without any appreciable lesion—"sans lesion appreciable." Surely the state of the mucous membrane above described is an "appreciable lesion," in every sense of the word. We should certainly consider a structure which is in a high state of inflammation as one that is a state of lesion or alteration from the natural state. Let us hear how M. Nysten defines the word in his Medical Dictionary. 'Lésion (from Lædo) se dit de *toute alteration* des proprietés vitales, des fonctions de l'economie animale, ou des tissues organiques." Here then we have every alteration, whether in function or structure, properly designated as a *lesion*.

Case 2. A man, 40 years of age, had had, for many years, a large ulcer on the left leg, which was greatly swelled beneath the ulcered part, the limb resembling a case of elephantiasis. From this

ulcer much pus was daily discharged. For six or seven months past this man had also a moist cough, without dyspnœa or pain in any part of the thorax. While in hospital for the ulcered leg, he was suddenly seized with severe dyspnœa, at the same time it was remarked that the ulcer was nearly dry. The patient was seated on his bed in a state of inexpressible anxiety, conjuring the physician to relieve him of the load that weighed upon his chest, and threatened every moment to suffocate him. The pulse which was moderately quick, was easily compressible—the inspirations were short, quick, as if by convulsive efforts. In vain did they seek for a cause of this alarming state, in the heart or lungs;—the structure of which, on minute examination, appeared sound. The cause of dyspnœa, then, could not be ascertained—and the symptom became more formidable every hour. It was not alleviated by sanguineous depletion, blisters, or other remedies employed. Next morning the patient appeared to be in momentary peril of suffocation. With the hope that the cause might be situated in the larynx, tracheotomy was performed by M. Roux; but no alleviation followed, and the patient expired in the evening.

Dissection. The parenchymatous structure of the lungs was perfectly sound and crepitous, with the exception of a small hepatized portion in the left side. The mucous membrane exhibited only a few patches of redness, and those of trifling extent. The heart and great vessels were sound. Nothing remarkable in the head or abdomen.

In this case, we are forced to admit that the appearances, *post mortem*, were by no means such as could explain the fatal dyspnœa —and therefore we agree with M. Andral that—if ever there was a case of purely nervous or spasmodic asthma, unconnected with organic lesion, this was a fair specimen. It teaches us one important lesson (which seems to be little attended to in these days of ultra-pathology) that the *functions* of vital organs may be so far disturbed as to cause death, *before* any organic change takes place that remains cognizable after life has ceased. How many thousand of the profession are daily led astray by mistaking the *consequence* of disordered function for the *cause* of it? Had the above patient lived a few days longer, and until the effusion or other morbid effect took place, the cause of death would have been set down, unquestionably, to its account. It is but rarely, however, that we have opportunities of seeing life cut off by disordered function alone. Organic changes so generally obtain before the fatal event, that we are naturally led to connect them as cause and effect. It is in this way that pathology is capable of leading us into error. It is worthy of being remembered that the dyspnœa, in the above case, commenced about the time that the discharge from the ulcer ceased. There is but too much scepticism, in the present day, respecting the serious effects of suppressed discharges, repelled eruptions, and metastasis of disordered action. We are sorry for this—and we think it may be accounted for by the attention of men being more directed to organic changes than to minute symptomatology—or, in other words, disturbed functions.

M. Andral mentions the outlines of a case which occurred in the practice of Dr. Bouillaud in the Hopital Cochin, and which bears on this subject. A man had been a long time affected with a dartrous eruption, which suddenly disappeared without any known cause or particular application. At this precise juncture, the man became affected with dyspnœa, which soon became extreme, and with which he had never been affected previously. On minute examination, no organ could be found in fault. Leeches and blisters were applied to the part whence the eruption had disappeared. The dyspnœa, by this measure, was completely removed in a few hours.

M. Guersent, an accurate observer of phenomena, has related two cases of children, severely affected with remittent dyspnœa that proved fatal in both cases, and in a very prompt manner. The minute anatomical observation could not detect a single organic lesion of any part in the body.

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2. *Inflammation of Veins.** Inflammation is by no means a rare occurrence after bleeding, nor is *suppuration* itself so rare a disease as Dr. Chapman supposes. Our author can find but one case on record, analogous to his own, and that case is only sketched by John Hunter. In dissecting the arm of a man, Mr. Hunter traced a series of adhesions along the course of the vein. But near the axilla, says he, "the vein had taken on suppuration, beyond which adhesions had not formed, and this had given a free passage for the matter into the circulation, of which the patient most probably died." The case related by Dr Chapman occurred in the person of a coachman, who, after being bled for a slight pleuritic complaint, continued to exercise the arm for several days after inflammation had commenced. When Dr. Chapman first saw him, the case presented a serious aspect. The arm was swelled to twice its natural size, the pain and inflammation being excessive. On pressure, a copious stream of purulent matter issued from the orifice, and the vein could be distinctly traced for several inches, in an enlarged state, imparting the sensation of a hard elastic tube under the integuments. There was pain in the left side of the chest, and a universal soreness over the body. Little or no pyrexia was observable, but the pulse was quick, weak, and irregular. The patient was greatly harassed by restlessness and agitation. There was also some incoherence of ideas. Dr. Chapman had no doubts as to the nature of the disease—"inflammation of the vein, extending probably to the heart, and the introduction of puss into the blood." "To subdue the inflammation of the vein, and arrest the pus in its passage to the circulation, were obvious indications." Notwithstanding the feebleness of the arterial action, our author bled to 12 ounces. The bleeding was followed by no sensible effect, and exhibited no phenomena of inflamma-

* Dr. Chapman. Philadelphia Journal, No. 14, February, 1824. Art. Phlebite, by M. M. Breschet et Vilerme.—*Dict. des Sciences Medicales.*

tion. The serum and crassamentum continued commixed, as if slightly stirred together.

Here we would just put it to Dr. Chapman, whether *suppuration* when once established in a part, can be *safely* checked by bleeding? Do we resort to this measure under common circumstances? Is not the character of an inflammation completely changed, *after* the suppurative process has once taken place? Dr. Chapman may say that he apprehended inflammation of the heart. The symptoms certainly did not resemble those of carditis. They much more resembled what we would be led to expect from a sedative substance taken into the circulation, and depressing all the powers of life.

But to the sequel of the case. The arm was enveloped in a blister, except at the puncture, to which a poultice was applied. Purgatives, till the bowels were freely opened. In the evening he seemed somewhat better; but, in the night, the pain in the left side returned with violence. "*It did not, however, raise his pulse.*" Our author became convinced that the pain arose from inflammation of the heart, and therefore placed a large blister over the region of that organ. Though relieved in respect to pain, our author, on the following morning, (second) had the mortification of finding the other symptoms worse. "With a pulse weak and tremulous, he was wild and distracted." Dr. Chapman again directed blood-letting by cupping to the amount of six or eight ounces, and a blister to be applied behind each ear. A bandage and compress were also applied, a short distance above the puncture, with the view of preventing the passage of pus along the vein. *Third morning*, still worse. The morbid sensibility of the whole body had become so great, that the patient could scarcely bear the weight of the bed-clothes. At this period Dr. James added his assistance, and they agreed to give camphorated emulsion in large doses. But all was unavailing—the patient sunk progressively, though by opium and strong stimulants life was preserved for two or three days longer.

Dissection. The vein was exposed from the wrist to the axilla —and this appears to be all that was permitted. The external surface of the vessel was, in many places, inflamed, and especially above the puncture. Betwixt this and the shoulder, matter had penetrated through the vein, by four distinct apertures, into the neighbouring cellular membrane, forming small abscesses. Directly around the puncture there was an abscess, containing a large spoonfull of pus, mixed with a dark fetid sanies. Sphacelus had already destroyed a portion of the cellular texture. The vein laid open, inflammation, more or less, was seen from a little below the elbow to the final point of dissection. The appearance in the *coat* indicated the highest grade of inflammation; the appearances on the internal surface of the vessel were not so strong. Below and above the orifice, for several inches, gangrene had taken place, bounded by an extensive erysipelatous blush, and the inner surface of the vessel, within this space, had begun to slough. The quantity of pus in the cavity of the vein was small. The discharge of matter from the wound indeed had greatly diminished prior to

the patient. No appearances of adhesions presented themselves in any part of the vessel.

It is a great pity that Dr. Chapman was unable to prosecute the dissection farther, as the question of carditis was thereby left undecided. We think that, from the symptoms during the life of the patient, and from the general history of such cases (some of which we shall shortly notice,) the probability is, that inflammation had not reached the heart. In cases so untoward, and, comparatively speaking, so uncommon as these, the rule of conduct, in respect to treatment, must be left to the judgment of the practitioner. We can have no doubt that Dr. Chapman saw indications for the depletive measures which he put in force, nor have we the slightest idea of making any reflection on the treatment pursued. But we would venture to question the policy of venesection under such circumstances again—especially after the suppurative process was established, and when the heart and vascular system were in such a weak and irregular state, as was indicated in the case above. We confess that we should be more inclined to administer stimulants, tonics, and cordials with anodynes, to enable the constitution to bear up against the irritation of local affection, and the sedative effects of matter draining into the circulation. We should also endeavour, as Dr. Chapman did, to stop the course of the purulent secretion towards the heart, though we doubt whether ligature of the vein, as proposed by our ingenious author, would be the most eligible means of effecting the desirable purpose.

We shall now proceed to some historical notices of inflammation and suppuration of veins, as the result of phlebotomy.

Dr. Chapman has remarked, that "cases of this sort are extremely rare. Few at least have been recorded. I have met in my researches with only one at all analogous." This was the case quoted from John Hunter, at the beginning of this article. In the memoirs of that able pathologist, M. Breschet, we find several cases of this sort, collected from writings to which Dr. C. can have easy access—many of them in his own language. The first case we shall notice is related by Mr. Hodgson, page 512, and may, we think, be acknowledged by Dr. Chapman to be analogous to that detailed by himself, excepting the obliteration of the vessel. It was communicated to Mr. H. by Mr. Broughton, surgeon to the life-guards.

A robust soldier was bled in the arm for ophthalmia. The day after the bleeding, great swelling and pain commenced in the arm, and gradually extended upwards. Fever rose—the pulse was quick and feeble—the breathing was difficult—there was great prostration of strength, with pain in the head, back, and extremities. The symptoms continued until the 23d day, when a painful swelling was observed above the clavicle—and soon afterwards another, beneath the angle of the lower jaw. The symptoms increased slowly—the patient became delirious—and died in the course of the seventh week after the bleeding.

Dissection. The cephalic vein had become obliterated from an inch above the wound till it reached the shoulder. The sub-

clavian, axillary, and brachial veins to the bend of the arm were thickened in their coats, so as to resemble arteries. "The external jugular and subclavian veins were filled with pus." When slit open, they were found lined with lymph. The diseased appearances were not gradually lost, but terminated abruptly. The heart was sound.

We think this case is very analogous to that of Dr. Chapman; for as to trifling local differences of appearance in the veins, we do not consider them as altering the general pathology of the disease. Mr. Hodgson remarks:—"several cases of extensive inflammation of veins, after the operation of venesection, have been communicated to me, and I have seen one in which the symptoms and appearances on dissection, although not so extensive, were similar to those which are described in the preceding case. The symptoms were very like those of typhus fever, and the appearances on dissection were, in some places, adhesion and obliteration of the vessels; in others, effusions of coagulated lymph or *pus* into their cavities, with great induration, thickening, and adhesion of the surrounding parts." *On the Arteries*, p. 515.

The following case, related by Mr. Travers, is in still closer analogy with Dr. Chapman's than the one detailed by Mr. Broughton.

Hugh Johnson, aged 33, of impaired constitution, was bled in the median basilic vein of the right arm, on the 15th May, 1810. On the 24th, he complained of pain in the arm, and observed that the orifice had never closed. The pain extended up the arm, and he had a quick pulse. On examination, there was a small open wound, with a slight discharge of pus. Poultices, fomentations, leeches, and purgatives. The local symptoms appeared to diminish, but typhoid constitutional symptoms increased, and he died on the 6th June, or about three weeks from the accident.

Dissection. The wounded vein appeared much enlarged, owing to an unusual thickening and adhesion of the surrounding cellular substance. "Internally, pus was found occupying the mediana longa for about two inches below the origin of the median cephalic and basilic, and a similar appearance was traced through the whole course of the humeral vein to the axilla." Before passing under the clavicle, about an inch, the vein abruptly presented its natural appearance, "and there was no sign of disease between that point and the heart." The heart was sound, with the exception of "a small circumscribed patch of lymph upon its anterior surface."

In a case, says M. Breschet, observed by M. Recamier, remarkable for the prompt developement of the inflammation, and the speedy death of the patient (on the 8th day) "the cephalic vein, when opened, was found filled with pus throughout its whole extent. The parietes of the vessel were inflamed and thickened —red externally, and of a slightly violet hue in the interior." *Dict. des Sciences Med. vol.* xii. *p.* 344.

We shall conclude this short notice of phlebitis with a case related by M. Breschet, which terminated favourably, though pus was unequivocally demonstrated in the vein.

Jacques Fréaud, 34 years of age, was admitted into the Hotel Dieu, in the month of October, 1814, for an affection of the right arm, resulting from bleeding. It was the 8th day from the accident. The arm was swelled and painful—the orifice where he had been bled was open, and presented a fungous appearance, with discharge of pus. The swelling and pain of the arm were relieved by poultices, fomentations, and rigorous abstinence; and now the vein could be felt, like a cord stretched from the bend of the arm to the arm-pit. M. Dupuytren, to satisfy his pupils that there was inflammation with purulent secretion in the vein, made an opening, about one third way up from the orifice, into the vessel, when immediately there issued forth both blood and matter. Other experiments were made by Dupuytren, which left no doubt on the subject. In about sixteen days the man was discharged from the hospital cured.

For a great mass of information on this subject, we refer our readers to the 41st volume of the *Dict. des Sciences Medicales, art.* "*Phlebite*"—to the first and third volumes of "*Transactions of a Society* for the Improvement of Medical and Chirurgical Knowledge," where the papers of John Hunter, Matthew Baillie, and James Wilson are to be found—to Mr. Hodgson's work on the Arteries—and to Mr. Travers's Surgical Essays.

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3. *Diagnosis between Irritation and Inflammation of the Mucous Membranes of the Bronchiæ.** M. Nauche thinks he has discovered a chemical test of bronchial inflammation in the secretion from the mucous surfaces. In the natural state, or where there is merely *irritation*, the mucous secretion he has found to be acid—while, on the other hand, when actual inflammation obtains, the nature of the secretion is changed, and it becomes alkaline. The two states are readily recognised by turnsol paper, which turns red with the one and blue with the other.

"M. Nauche has examined the expectoration, with respect to its acid and alkaline character, in the diseases of the respiratory organs. He believes, from this inquiry, that they may be divided into matter produced by irritation—an increased secretion of the mucous follicles, which line the membrane of the air-passages—and into matter, or expectoration, which results from their inflammation. He has observed that the white, mucous, frothy expectoration, which is frequently brought up in large quantities by persons in a state of agony, has always an acid character, when the air-passages have not been the seat of previous disease. This character is likewise found in the white, frothy expectoration which occurs during the whole continuance of pleurisy, whether acute or chronic; and at the commencement of pneumonia, when the matter expectorated is white, or even yellow. It is often lost in the course of this disease, and re-appears towards its decline. The acid expectoration is likewise found in emphysema of the

* Medical and Physical Journal, Nov. 1824.

lungs and scrofulous phthisis, when the tubercles are but little developed—in the state called crude. It is evident, in all these cases, that the mucous membranes which furnish the expectoration are only in a state of increased excitement, and that they are in no degree inflamed. M. Nauche has likewise found acid expectoration in certain advanced cases of phthisis. He believes that this depended upon these matters being the product of an increased secretion of the mucous membrane lining the excavations formed by the tubercles.

"The expectorated matters, on the contrary, are always alkaline in inflammation of the mucous membrane of the bronchiæ, and in all the cases designated by the names of acute and chronic colds, or mucous phthisis (*phthises muqueuses*). Although this expectoration is not regarded as purulent, it is nevertheless a kind of pus peculiar to inflammation of these membranes, and analogous to the purulent serosity which is furnished by serous membranes when in a state of inflammation.

"The expectoration likewise becomes alkaline in peripneumony, when the inflammation of the pulmonary tissue communicates itself to that of the mucous membrane of the bronchiæ; and this secretion is the product of the inflammation of these two tissues.

"The expectoration is likewise alkaline in phthisis pulmonalis, in the second or third stage, when the tubercles become broken down. It is usual, in such cases, to find the internal membrane of the lungs deeply altered.

"It frequently happens particularly among phthisical patients, that both these kinds of expectoration are to be found in the same vessel. That which results from an augmented excitement comes up most easily—is white, frothy, and acid; the other is brought up with difficulty, is yellow, thick, and alkaline. In this disease, when the patient has only the former kind of expectoration, his life is often in the greatest danger." 433.

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4. *Peculiar Spasms in Children.** The disease to which Mr. North's attention has been drawn, nearly resembles that described by the late Dr. John Clark, in the fourth chapter of his Commentaries. But it was long ago alluded to by Underwood, and, ten years ago, minutely described by Dr. Kellie, in the 12th volume of the Ed. Med. Journal. In the year 1817, Dr. Johnson published a short paper on the disease (which he denominated "carpopedal spasm") in the 3d volume of the monthly Med. Chir. Journal. Some of these sources of information Mr. North has overlooked. The affection is thus described by the acute observer last mentioned.

"The premonitory symptoms occur at an uncertain age—generally, I believe, between the third and seventh month. At first, they may not be sufficiently striking to attract the particular attention of the friends, although the practitioner, who has had opportunities of

* Mr. John North, London Med. Journal, January 1825.

watching the progress of similar cases, might, with much confidence, predict the series of symptoms which is yet to be developed. Each time the child wakes from its sleep, the breathing is for some moments unusually accelerated, and is accompanied by such a kind of noise as would be caused by an increased secretion of the mucus of the aerial passages. If the little patient has previously enjoyed a good state of health, the characteristic rotundity of features observable in the infantile state, will quickly undergo a remarkable change. The countenance soon becomes anxious ; the sides of the nose are drawn in ; the face is pallid and emaciated.—When put to the breast, the child sucks greedily for a moment, but suddenly ceases to do so, and frequently throws back the head, which remains rigidly extended for some time. Whatever may have been the previous condition of the bowels, they now become constipated.

"This state may continue for a very uncertain time, without any remarkable alteration : the following symptoms, however, are gradually added to those above enumerated ; they occur irregularly. A convulsive affection of the hand is usually the next morbid sign which excites attention. The child's thumb will be found constantly and firmly pressed upon the palm of the hand. The wrist and ankle joints are bent rigidly inwards. The head is now almost constantly thrown backwards, keeping the anterior muscles of the neck upon the stretch. The inconvenience the child suffers, when he wakes, is no longer confined to a mere acceleration of the breathing. This symptom still continues in an aggravated degree, but the noise accompanying the respiration has gradually assumed a very different character from that which marked it at first : each respiration is now attended by a loud crouping noise, which might be heard in an adjoining apartment. The child has frequent attacks of convulsions, during which the features are much distorted. These convulsive paroxysms vary in violence and in duration in different cases ; sometimes the whole body is affected. In the child of a Mons. Lambert, in whom the convulsions were frequent and severe, the state of opisthotonos was so complete, that for many days the head and heels were the only parts which touched the bed ; if, with difficulty, this apparently painful position was altered by the mother, it was quickly resumed. The brow of the child is generally knit. The anxiety of the countenance is extreme. There is no febrile action in the system to be detected No determination of blood to the head is manifested, either by an increase of heat or a flushed countenance.

"I have known the firm contraction of the thumb, the rigidly bent position of the hand and foot, and the crouping noise in respiration, continue for many weeks without intermission. The child sometimes appears lively : its countenance will be animated by a momentary cheerfulness ; but it almost invariably awakens from its slumbers, however tranquil they may be apparently, with a convulsive paroxysm, similar to that which I have described. The paroxysm having terminated, the child appears much exhausted, and almost motionless for some time. Dr. Clarke observes, that the term of chronic croup has been sometimes applied to this af-

fection ; "but it is very different from croup, and is altogether of a convulsive character.'" 40.

Dr. Kellie's description of this curious disease is worth stating in this place, because the pathology of the complaint has given rise to considerable discrepancy of opinion, and the disease itself does not appear to be known to the generality of practitioners.

"But in many cases this remarkable tumour of the hands and feet has appeared to me to constitute but a part of a disease, of a somewhat more serious and striking nature. Even the swelling itself deserves a more particular description than has been bestowed upon it by Dr. Underwood.

"It has a considerable degree of roundness and elevation, and looks like that sort of tumour which might arise on the same parts from a blow or contusion. It seems to arise suddenly, as it has generally this roundness and elevation from the time of its first attracting observation. When first observed, it has somewhat of a mottled, livid, and purplish colour ; I would say it looks cold like, or that it resembles the chilled hand of a full and healthy child after exposure to a cold and frosty atmosphere. It feels cold also, at least it has no inflammatory heat, and does not appear to be morbidly sensible, or to give any pain to the child when handled. It does not pit on pressure, but rather gives the sensation of firmness and resistance ; and when pinched, and attempted to be moved sideways, it has always conveyed to me the notion of a disease of infants, which is known by the name of skin-bound.

"This swelling, which is confined to the anconal aspect of the metacarpus of the hand, and to the rotular aspect of the metatarsus of the foot, terminates abruptly at the carpus and tarsus, insomuch, indeed, that, in lusty children, it seems in these places as if confined by a cord or bandage. I have known this tumour to continue for weeks together. Sometimes it disappears in a few days, not again to return. In other instances, it has from time to time disappeared, and reappeared at short intervals. When it continues without abatement for any length of time, for a week or two, it sometimes softens, becomes looser and more compressible ; its colour changes to paler, and acquires more of a leucophlegmatic hue ; in a few cases it has become truly leucophlegmatic, and the œdema has spread upwards on the legs and thighs. But this is a very rare occurrence, of which I have seen but one or two examples.—Its more sudden disappearance, without undergoing these changes, or without passing to the state of leucophlegmasia, is by far more common. But this swelling of the tops of the hands and feet is according to my observation, connected, in a great proportion of cases, with another appearance of a more formidable nature, a spastic contraction of the flexor muscles of the thumbs in the upper, and of the toes in the lower extremities. The thumb is rigidly contracted, and permanently bent downwards, and laid flat upon the palm of the hand ; and, in like manner, the toes are bent down to the planter aspect of the foot. Along with the thumb, the carpus also is, in some cases, drawn thenard by a spastic contrac-

tion of its flexors, which much increases in appearance the prominence and sphericity of the metacarpal tumour. The child labouring under this state of disease is unhappy and restless, but does not appear to suffer much, if any, pain, in the parts affected, unless an attempt be made to force them from their situation ; and even this forcing of the thumb or toes from their unnatural position, does not always make the child cry. Though peevish, fretful, and evidently suffering from irritation, he cannot be said to labour under pyrexia at all times. In some cases, indeed, the pulse is more frequent than in health, and towards evening there is an increase of heat, and perhaps flushing of one or both cheeks, with coldness of the feet. The bowels are commonly torpid, and the stools obtained by laxatives are, as Dr. Underwood has described them, fetid and clayey, or green, sour, and slimy. This spasmodic affection, though on some days it may appear more relaxed than on others, is, upon the whole, wonderfully persistent. I have known it continue, with little abatement, for many weeks. In others, it has yielded within a shorter period, in a few days, in a week or a fortnight. In one child, who at length died of supervening marasmus, the contracted state of the thumbs continued, with little occasional relaxations, for three months. The greater number of cases which I have seen have terminated favourably.—I have sometimes known eclampsia to supervene to this tonic spasm of the thumbs and toes. One child had repeated fits of convulsion, on three successive days, and eventually recovered. Two others have died after supervening eclampsia. In another case of this disease, in which the thumbs and toes had been contracted for three or four weeks, fever supervened, and the child died after passing through all the symptoms of hydrencephalus acutus. Two other children, affected with the disease in question, have tardily sunk under that train of symptoms which Dr. Armstrong distinguished as the hectic of teething. These are the only instances I have met with, in which this disease has had a fatal termination ; and that termination, it may be observed, has been by a sort of conversion, or gradation, by the supervention of eclampsia, hydrencephalus, or abdominal fever." 450.

In all the cases, the age was between six months and two years —consequently within the period of dentition. Dr. K. therefore looks upon dentition as the chief, though probably not the only cause of the disease in question.

Dr. Johnson, in the volume before cited, has related a case, which appears to have been an exquisitely marked one of this peculiar affection—and, as it is short, we shall cite it.

" The patient was a delicate female child, nineteen months old, and cutting three or four teeth at the time. She had been ill eight days before the Reporter saw her ; but according to the mother's account, there was little or no variation in the symptoms all the time. When first seen, the child three or four times in the hour was seized with spasmodic affections of the respiratory muscles, consisting of repeated attempts to fill the chest, during which she

threw herself back, as in opisthotonos, and appeared as though she would be suffocated. These fits would last ten or twelve minutes, after which the child was somewhat easier, but always fretful and peevish. The backs of the hands and insteps were swoln and hard. The thumbs were rigidly contracted, and locked across the palms of the hands. The toes were bent down towards the soles of the feet, and both wrists and ankles were rigidly bent by the flexor muscles, and kept permanently so. The little patient could take no food: she was slightly feverish; the bowels torpid; and the stools clayed, slimy, and offensive. The eyes looked very heavy, and inanimate. The child extremely irritable and restless both by day and by night.

"For reasons unnecessary to mention, no very active means were employed for some days, during which the child got worse, and was evidently declining fast. Hydrencephalus or eclampsia being now dreaded, leeches were applied to the temples; calomel and antimonial powder were exhibited thrice a day, and the warm bath was employed in the evening. After the bath and bleeding, the spasms went off for twelve hours entirely, and the child took some food. They returned, however, but not so violently as before, and the convulsive respiration was much relieved. The calomel and antimony were continued, as was the warm bath; and the gums were deeply scarified wherever a tooth appeared to be coming. From this time the child gradually recovered, and on the 18th day the spasms had entirely disappeared."*

In no instance has Mr. North seen this disease fatal—and we can say the same in our own practice. It is well known, however, that the late Dr. Clarke, and the present most able practitioner, his brother, together with their elèves, looked, and still look upon this disease or this train of symptoms, as indicative of hydrocephalus, or rather of that state of brain which leads to hydrocephalic effusion. This treatment is consequently the same as in the last-mentioned disease. While we do not coincide with this school in viewing the disease in so grave a light, we think it prudent, in all these cases, to guard the head, while we freely lance the gums, and act upon the bowels. It must be evident that the spasms above described can only be produced through the instrumentality of the brain and nervous system, by which all power is supplied to the muscles, whether within or without the salutary boundary.—But a sympathetic affection of the brain and nervous system, as from dentition, bad secretions in the bowels, &c. is a very different thing from an idiopathic affection of the same organ, constituting an inflammation. The *latter* is dangerous, and cannot continue long without fatal consequences—the former (in which we include the subject of this article) is far less dangerous, and may go on, as the cases prove, for some weeks, or even months, and terminate favourably, without any very active measures. Still we would not advise that it should be treated too slightly, but always with the danger of cerebral inflammation or effusion, in our

* Med. Chir. Journal, for May 1817, p. 468-9.

mind—not in the active manner of acute hydrocephalus, but as a preventive of any such supervention. This appears to be the sentiment of Mr. North and of Dr. Kellie.

"The treatment (says Mr. N.) demanded in the above state, may be very briefly laid down. The gums should be freely lanced, if they appear swollen or inflamed. To keep the bowels open, purgatives must be given: calomel, in combination with powder of jalap, is perhaps the best remedy. During the convulsive paroxysm, the child should be put into a warm bath. The diet, if the child unfortunately is deprived of its mother's breast, should be very strictly attended to. The digestive powers are evidently weakened, and it is destructive to impose upon the stomach a task which it is not capable of performing, by giving solid food in any form." 41.

We have now put our readers in possession of all we know respecting the symptoms and treatment of this disease. Its pathology is obscure. For our own parts, we think it is produced by the irritation of dentition, or by morbid secretion in the digestive organs.

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5. *Dissection of Dr. Henning.* Dr. Henning was one of the principal writers in Hufeland's celebrated Journal, and a man of great learning and considerable talent. He was well known to many medical men of this metropolis, which he visited a few years ago. He died on the 2nd of December, 1823, of a chronic and distressing complaint, of which we are unable to give more than a very succinct sketch.

The first symptom was an extraordinary appetite, which being too frequently gratified, was followed by nausea, for the removal of which the patient was in the habit of having recourse to emetics of tartarized antimony. Obstinate and almost indomitable constipation was the next phenomenon, and was little relieved by any medicine employed. Being seized with typhus fever, he went through that disease with safety, and the condition of the digestive organs was, for a time, improved. In 1817, after some depressing moral causes, and exposure to atmospherical vicissitudes, he became jaundiced, and affected with a diarrhœa, which gave way to the usual remedies, and his health was apparently restored, at least, for a short time. Constipation again succeeded, and was of the most obstinate nature. Then came deep-seated pain of the epigastrium, which only gave way when vomiting was excited.—Still the appetite continued enormous, and the patient persisted in satisfying it, and that often with the most indigestible substances, though emetics were indispensable consequences. Worn out by canine appetite, pain, sickness, and constipation, this unfortunate physician was released from a painful state of existence, at the period abovementioned.

Dissection. The stomach was of enormous size, and in the neighbourhood of the pylorus, its coats were thickened, and of the consistence of cartilage. Every where else, the coats of this organ were exceedingly attenuated. There were no other morbid

appearances of any importance in the abdomen or other cavities of the body. *Journ. der Pract. Heilkunde, Aug.* 1824.

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*6. Fatal Asthma from Affection of the Glottis.** The researches of Magendie and others, teach us that, 1st—the constrictor muscles of the glottis are supplied by filaments from the superior laryngeal nerve—whilst the dilator muscles are supplied by branches from the inferior laryngeal or *recurrent* nerve—2nd, that the glottis dilates during inspiration, and is closed, almost hermetically, when we make any considerable muscular exertion, as in lifting a heavy weight, for example. Every one must have observed that the breath is firmly retained when we make any great straining exertion with the muscles, especially of the upper extremities. These physiological points are requested by our author to be borne in mind, as they will come in to an explanation of the following case.

Case. Michael, 22 years of age, a servant, was received into the hospital Cochin, the 26th of June, 1822, having been discharged only eight days previously from a MAISON DE SANTE, where he had been under treatment for two months, for what was called a putrid fever. The following symptoms were now observable ; viz. considerable hoarseness—violent pain in the throat—great sense of suffocation on the least muscular exertion—tongue white—appetite good—pulse frequent and small—face pale and emaciated—chest sonorous, except at the inferior part of the right side—respiration audible in all parts of the thorax—nothing remarkable in the action of the heart. The same symptoms were observable the following day. He expectorated abundantly. At ten o'clock in the evening he was obliged to start from his bed—his inspirations being profound and frequent, accompanied by a peculiar hissing noise. The patient appeared terrified, his eyes starting, and dreading instant suffocation, which indeed appeared inevitable.—His pulse was scarce perceptible. These alarming symptoms abated a little in the night. *June* 28. Still great anxiety. Blister to the region of the larynx. In the course of the day, a return of the sense of suffocation, with a horrible state of anguish, during which the patient tore the blister off his throat, and appeared strangling—his head erect, and his neck stretched as much as possible. 29th. Sense of strangulation still more distressing than ever—he was constantly putting his hand to his throat, as if to remove something that was strangling him. He cried for prompt relief from his dreadful anguish, his eyes starting from their sockets, and his countenance the image of despair—the whole of the respiratory muscles in a state of convulsive orgasm. These horrible symptoms continued till four o'clock in the morning of the 30th, when death put an end to his sufferings !

Dissection. An abscess was found situated at the posterior part of the larynx, and also on the sides, the cavity of which was capable of containing a filbert, and its internal surface smooth. The

* Dr. M. J. Bouillaud. Journal Complementaire, Juillet 1824.

cricoid cartilage was denuded. On closer examination, it was found that the abscess extended round the cricoid cartilage. The crico-arytenoid muscles were of a greenish colour. The arytenoid cartilages were confounded with the muscles abovementioned, which were in a state of disorganization. No nerves could be traced in them. The arytenoid muscle, however, and its nerves were well preserved. The glottis was not above three or four lines in length (its rima.) The articulations of the arytenoid cartilages with the cricoid were destroyed. The mucous membrane of the larynx was pale, and the cavity itself filled with reddish and frothy mucus, which was also found in the trachea and bronchia. The mucous membrane of the lungs was, generally speaking, of a deep red colour. The inferior and posterior portion of the right lung was hepatized, but all the rest of the lungs sound. There was no disease in any other part of the thorax. *In the small intestines were found numerous ulcers perfectly cicatrized.*

We shall not enter into the detail of M. Bouillaud's attempt at explaining the phenomena of strangulation in this case. It is thus, that the nerves and muscles of dilatation about the glottis were diseased or destroyed, while those of *constriction* were in a state of integrity. The medical attendants were completely puzzled as to the nature of the case, before the death of the patient; but surely there was the clearest evidence that obstruction to respiration existed at the upper part of the trachea, and, therefore, the operation of tracheotomy was so loudly called for, that we are astonished any surgeon could allow his patient to struggle two or three days in a state of strangulation, without performing the operation! —It was in vain that M. Bouillaud and his associates ascertained, by the stethoscope and percussion, that nothing material was wrong about the lungs and heart, when they stood listlessly looking on, and suffered their patient to die the most horrible death that human nature can undergo. The disease of the larynx might, or might not be, afterwards, fatal. That chance should have had no effect in deterring from tracheotomy, which would have given present relief, and a probability of permanent security. Our author cites a case that happened in one of the wards of La Charite, under M. Fouquier, which is completely in point. A young woman had all the symptoms of laryngeal phthisis, and was on the point of suffocation, when M. Roux practised tracheotomy. The operation was attended with some alarming symptoms at the time, but they gradually subsided, and the young woman perfectly recovered. M. Bouillaud observes that, as the dilator muscles, in this case, were in a state of disorganization, it is probable that it would have been necessary to keep an artificial passage open for life.—"One of the most deplorable events that can happen to a man, says he, is, without doubt, the loss of *voice and speech.*" We are very far from agreeing with Dr. Bouillaud on this point. We do not think that the said loss is by any means the most deplorable that can happen to man—or woman either. The patient who was operated on ten years ago, and more, at Portsmouth, and who still breathes through a tube in the trachea, is in perfect health, and

the full enjoyment of life—with the exception that he can only listen to, but not join in the conversation around him. It would be the part of a wise man to pursue this plan often, without any silver tube in his throat.

There is a horse at Charenton, which had tracheotomy performed on him, and who breathes through a tube. He draws a chaise; and this fact seems to surprise M. Bouillaud, for the physiological reason mentioned at the beginning of this article. But our author ought to recollect that, although we stop the breath when we wish to make any violent muscular effort, it is not absolutely necessary that the rima glottidis should be closed during very great muscular exertion. A horse running with all his might, or a man either, keeps the glottis open all the time.

We hope our surgical brethren will attempt, more frequently than they do, to save the lives, or at least, the sufferings of patients threatened with suffocation in laryngeal phthisis, by tracheotomy.

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7. *Remarkable Intus-susception.* Mr. Davies has related (*Med. Repos. Dec.* 1824.) a curious case of intus-susception, where one half of the colon was received into the other half, and where the caput coli had gone down right to the anus. "The intus-susception had evidently commenced at the *caput cæci*, and as it extended, it doubled the colon upon itself, until the part which was first received into the portion below it, arrived at the situation already mentioned." The case occurred in a child, six years of age, who, having eaten a quantity of raw carrots, was seized with pains in the bowels that continued more or less for eight months afterwards, when she died. The bowels, in the mean time, were regularly open, about three times a day; "but the stools were always very thin and watery—and during the last three months, they were mixed with slime and blood." As the lower half of the colon was lined with the inverted upper half, it followed that no part of the fœcal remains came in contact with the colon at all—the termination of the ileum being drawn down through the centre of the intus-susception to the anus. This may account for the stools being thin and watery. There was no remora in the large intestines for the formation of natural stools.

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8. *Hospital Reports.** We noticed the first of these Hospital Reports (from the Wards of Laennec) in our third number, page 240 *et seq.* We now proceed to take a short view of the second of these returns, which is made out by M. Bayle, from the ward of Professor Cayol. Our author commences with some account of those that remained in Hospital when Laennec's quarter closed.—

* Des Maladies Observées à la Charité, dans les Salles de Clinique de M. Le Professeur Cayol—(April to May, 1824) par M. Bayle. *Revue Med. November*, 1824.

It is stated that among these there were no less than five recoveries from what was considered, and by the stethoscope ascertained to be *confirmed phthisis*.

There had been cough—purulent expectoration—progressive emaciation—hectic fever—nocturnal perspirations—and, finally, pectoriloquism in some part or other of the chest.

In this report there is the sequel of a remarkable case, which we have given in pages 241-2 of our third number. It was of a young man who had entered the hospital with articular rheumatism, which gave way to antimonials. Next succeeded pleuropneumony, with great action of the heart, which led M. Laennec to examine that organ, and he found it organically diseased. The pulmonic inflammation was cured—but hypertrophia of the heart remained and went on increasing. At length, it was found that every large artery in this patient's body presented a hissing noise. Such was his state when our former notice closed. Some time afterwards, the patient was seized with furious delirium which ceased in five or six days, after the usual remedies, as cold to the head and sinapisms to the feet. To the delirium succeeded a great prostration of the intellectual faculties, in which condition the patient continued about a month, with this remarkable peculiarity, that when he became refractory, the action of the heart diminished, and the hissing noise of the arteries subsided, and *vice versa*. Diarrhœa now came on—the patient wasted to an extreme of emaciation, and appeared in the jaws of death. In this state M. Cayol tried various means of recalling the rheumatic inflammation to the joints, as sinapisms, &c. without effect. Nevertheless, after six months sojourn in La Charité, the patient gradually recovered his reason, and with it his health—the action of the heart returning to his natural rhythm.

The above case is remarkable as having completely deceived Laennec with the stethoscope in his hand. He pronounced the disease of the heart to be organic, and consequently incurable—for where do we see organic lesion of this viscus cured ? It is a dangerous thing to give a very decided prognosis or diagnosis in diseases of internal organs, since one failure will do more harm than fifty instances to the contrary. The worst of the stethoscope is, that the confidence which the auscultator places in it, may occasionally take off his attention from the general phenomena of the disease, by which others are guided in their diagnosis. Let him, therefore, be on his guard against this failing, lest he bring a useful diagnostic auxiliary into contempt.

We now come to the patients who had entered the hospital during M. Cayol's own receiving quarter. They were, in number, 182, of which 111 were acute, and 71 chronic affections. There were 37 of continued inflammatory fever, arising from no appreciable cause, and occurring almost entirely among the labouring classes. Excepting where the patients had used stimulating ingesta at the beginning of the disease, there were very few symptoms of gastric or intestinal irritation—the head or chest appearing to be the chief seats of local affection.

On entering the hospital, M. Cayol placed the fever patients on

the lowest diet—ordered them diluent drinks, emollient glysters, fomentations, &c. He applied leeches to the part which seemed most affected, as to the pit of the stomach, the temples, or the chest. Care was taken, however, to distinguish those gastric and intestinal affections which were symptomatic merely of cerebal disturbance, from those which were primary. In elucidation of this discrimination, he relates the heads of three cases. *Case.* 1. A young man, 20 years of age, had acute cephalalgia; very red tongue; great tenderness at the epigastrium on the slightest pressure; frequent nausea and vomiting. Here then were the Broussaian signs of gastro-enterite or, at all events, gastro-enteritic irritation. Next day, the head-ache was increased, the pupils dilated, with delirium and constant vomiting. Fifteen leeches applied to the temples, and cold applications to the head completely removed not only the cerebral, but the whole of the gastro-intestinal symptoms. The *second case* was that of a young woman who was affected and treated in similar manner to the above, and with similar success. The *third case* analogous.

Of the 37 cases of fever, two only proved fatal:—one might be termed *adynamic*, the other, *ataxique*. The first was an individual debilitated by fatigue, bad diet, and mental anxiety. The fever was preceded by rheumatism, which at first was seated in the hepatic region and edges of the ribs, accompanied by cough, tenderness of the hypochondrium, head-ache, and yellow tinge of skin. *Whey and gum-water were prescribed, and a dozen of leeches were applied to the anus.* These means produced a sensible amelioration at first. On the 4th day, the hypochondriac pain ceased entirely, giving place to a very painful swelling of the left shoulder. On the 5th day, delirium supervened, with nausea, vomiting, and diarrhœa; pulse small and weak. *Sixth day.* Augmentation of the diarrhœa; cessation of pain in the left shoulder; bad smell about the patient; decomposition of the features; sinking of the eyes—decubitus dorsalis, &c. *Some extract of bark with tincture of rhubarb was prescribed, and a sinapism to the left shoulder. Seventh day.* The left shoulder is swelled and painful, as are the right elbow and wrist—cessation of the diarrhœa—great amelioration of the cerebral symptoms—more expression in the countenance.—This favourable train of phenomena did not continue long. The articular swellings subsided, and all the bad symptoms returned, except the diarrhœa. Three times, in the course of this fever, did these metastases take place from the external to internal parts; and thrice was the rheumatic inflammation recalled to the surface by tonics internally, and rubefacients externally. On the 12th day, the patient's intellects were perfectly clear, and he received the sacrament; but debility had now made great progress—and the patient sunk on the 16th day, preserving his intellectual faculties in a state of integrity till the last moment.

On dissection, the joints which had been the seat of the rheumatic pain were found inundated with a puriform fluid. On the mucous membrane of the stomach and bowels were a few rosy-coloured spots, (such as here seen frequently in those who have had no disturbance of digestive functions during life) but without any

alteration whatever of structure. The thoracic organs were sound, as was the brain, with the exception of a slight injection of the meninges.

The following case is not much in favour of the Broussaian mania now raging over Europe.

"A woman, about 50 years of age, was carried to La Charité, in the 23d day of a very severe fever, and apparently in a dying state. The marks of numerous leech bites, blisters, and sinapisms, attested the activity of the treatment previously pursued. The symptoms were those which characterise the last stages of typhoid fevers. *Acidulated decoction of bark, with musk, were prescribed*, and she rallied a little, so that she lived six days after her entrance into the hospital."

On dissection, ten hours after death, the body was found to be greatly advanced in putrefaction, and very much swelled. "The encephalon and thoracic organs were sound. The stomach and intestine were filled with gas. The mucous membrane lining them was pale and fine; and after the most scrupulous examination, presented not the slightest trace of alteration." The author remarks, and with justice, that "this dissection, made in the presence of numerous students (most of whom expected to see a train of very different phenomena) incontestably proves that the group of symptoms to which has been attached the name of *adynamic fever*, may exist without any appreciable local inflammation, even of the mucous membrane of the stomach or bowels."

M. Cayol, we are informed, endeavours to impress on the minds of his clinical pupils, the following pathological precepts and doctrines.

"1mo. It is undeniable," says he, "that the progress of pathology has lessened the number of essential or idiopathic fevers—and that many which have been ranged in this class, were merely symptomatic of local inflammation, especially of the cerebral abdominal organs. But at the same time, the existence of idiopathic fevers is equally proved, since we have become better acquainted with the symptoms which characterize local affections. Idiopathic fevers have a physiognomy peculiar to themselves, which is not to be confounded with that of symptomatic fevers. The local affections which are observed in their course, are not at all in correspondence with the intensity of the general symptoms. They are sanguineous or serous congestions rather than veritable phlegmasiæ. "These local affections do not precede the fever, but, in general, take place in the advanced stages of it—hence they cannot be the cause but the effect of the fever. The phenomena of idiopathic fevers are more in correspondence with those of the exanthemata, than with those which are symptomatic of local inflammation."

Secondly. M. Cayol observes that, in the great efforts which have been made, in latter times, to explain all the phenomena of fever on the principle of inflammation of the mucous membrane of the stomach and bowels, *effects* have frequently been taken for *causes*. The redness of the tongue, on which so much has been said, is, like the heat of the skin, one of the primitive phenomena of fever. Whenever, either from external or internal, moral or

physical causes, we have quickened circulation and respiration—that is, whenever we have fever, we observe almost immediately *that*, with more or less of dryness in the skin—which febrile heat coincides always with an analogous state, not only of the gastro-intestinal lining membrane, but of all the mucous membranes.—Whenever the skin is hot and dry, the tongue is red. And when there is redness of the tongue, with thirst, anorexia, and epigastric sensibility, there is also heat and malaise in the aerial passages and chest—dryness of the pituitary membrane, redness of the urine—lassitude and pain in the region of the kidneys. "All these phenomena evidently depend on the same cause—namely, a turgescent state of the capillary system of the skin and mucous membranes in the reaction of fever. Fever, therefore, is no more a gastro-enteritis, than it is a bronchitis, a cystitis, or a nephritis."

Thirdly. While, in consequence of this febrile movement, the skin and mucous membranes become the seat of strong sanguineous congestion and augumented sensibility, the slightest irritating causes may there determine inflammation. Hence the necessity for a mild temperature of the air and rigid abstinence, during the early stage of fever, or period of excitement. If this be unattended to—if irritating substances be taken into the stomach, as is too often the case, they readily kindle up an inflammation there—an inflammation which may become sufficiently intense to produce a symptomatic fever that alters entirely the original disease. Such, according to M. Cayol, is the origin of most of the gastro-enterites which are met with in the hospitals. The following may account for the greater frequency of these inflammatory affections of the mucous membranes in France than in England. "On sait que les gens du peuple ne manquent presque jamais, dés les premiers jours de la fièvre, de s'administer *due vin chaud ou d' autres boissons excitantes.* Ils reussissent quelquefois à provoquer une sueur abondante qui fait avorter la maladie ; mais le plus souvent ces boissons excitantes determinent un certain degré d'inflammation de la membrane muqueuse des voies digestives."

When a fever patient arrives at the hospital with symptoms of gastro-intestinal irritation, M. Cayol interrogates him respecting the regimen which had been used since the beginning of the disease ; and in general it is found that the fever has preceded the local inflammation, and that this last is the result of direct excitation. It is in these last cases *only*, (which, however, are sufficiently numerous) that the professor has recourse to leeches to the anus and epigastrium.

Where, on the other hand, no improper regimen has been pursued in the beginning of the disease, the redness of the tongue is observed to be in correspondence with the heat of the skin, and decreases, pari passu, with the latter, without the assistance of leeches. When the symptoms of general plethora are such as to demand sanguineous evacuations, M. Cayol prefers venesection to leeching.

But if improper regimen, at the commencement of fever, frequently determines irritation or inflammation of the internal surface of the bowels, so, on the other hand, the inhalation of cold air or

irritating vapours, not unfrequently produces irritation or inflammation of the mucous membrane of the air passages—a far more formidable complication than that of gastro-intestinal phlogosis. When catarrhal inflammation supervenes in the course of idiopathic fever, there is this singularity attending it—namely, that it does not ordinarily show itself in the form of cough, but only in the shape of acceleration and tightness of the breathing, and by the mucous rattling(râle muqueux)ascertained by auscultation. "Without this last means of exploration, we could not, in the majority of cases, recognise this dangerous complication in fever."

Of the treatment of continued fever on the continent, we need not speak, in this place, as it is well known to our readers; but the foregoing extracts will show that the doctrines of Broussais are viewed in a proper light by his compatriot Cayol. This indeed is the light in which they will be held when their author is no more, and when time shall settle the exact estimate of their value.

Intermittent Fevers. Nine of these were admitted, and gave way, as usual, to the sulphate of quinine, in the quantity of from 12 to 18 grains in the apyrexial interval.

Of the chronic diseases we do not see any in this report that need arrest our attention.

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9. *Tympanitic State of the Pericardium.* Mr. Scott of the Haymarket, aged about 47, had, for three or four years, been declining in health, but had not been under regular medical superintendence till a few weeks before his decease. No regular history of the complaint therefore could be obtained. He stated, however, that his appetite and strength had gradually declined, but his chief complaint was a fluttering, a palpitation, and a sense of anxiety about the region of the heart, with disturbed sleep, and frightful dreams. When seen a few weeks before death, his countenance was like that of a person in a state of anemia, except that there was also a chlorotic tinge in the skin. The pulse was very feeble, quick, and irregular—there was a tendency to œdema about the ankles—the appetite was almost entirely gone, and the patient felt approaches to syncope, on using any exertion, or ascending stairs. His mind was desponding, and temper irritable. The motions from his bowels were perfectly healthy. The chest in every part sounded remarkably well. In the region of the heart, percussion elicited as clear a sound as in any other part of the chest. The impulse of the heart against the ribs was very feeble, and scarcely audible. It was also irregular, in correspondence with the state of the pulse. The patient was under the care of Mr. Fincham of Spring Gardens, and was visited successively by Dr. Hooper, Dr. Macmichael, and Dr. Johnson.

When the above symptoms and phenomena were ascertained by the last-mentioned physician (not in consultation with the others) he

gave it as his opinion to Mr. Fincham that the patient laboured under disease of the heart—and that the nature of the lesion was probably a weakening and degeneration of the muscular structure. In a few days after this examination, the patient suddenly died, and the body was examined by Dr. Johnson, Mr. Fincham, and Mr. Henry Johnson.

Dissection, 13th February, 1825. The body extenuated, but still there was some peculiarly yellow fat on the chest and abdomen. The muscles, though wasted, were of a vivid red colour. All the organs in the abdomen were sound. On opening the chest, the lungs presented a beautiful blue appearance, sparingly mottled with white; they were very sound. Between the two lungs there presented itself a pellucid membrane distended with air. This was found to be the pericardium, reduced to a most extraordinary degree of tenuity, and distended with a very considerable quantity of air. The heart was small (not half filling the pericardium) and extremely degenerated in substance, a great part of its muscular structure being converted into a kind of fat. The whole was so lacerable as scarcely to bear handling. The parietes of the left ventricle were not more than a quarter of an inch in thickness—the internal surfaces of the cavities were pale, wasted, and not containing a single drop of blood. Neither was any blood to be seen in the large vessels issuing from the heart. There was nothing particular in the valvular structure of the organ.

Dr. Johnson has met with several cases where the heart was in this degenerated condition, but never before observed such a distention of the pericardium by air. It is quite evident from the size of the pericardium, and its extreme tenuity, that this collection of air must have been of some standing. This phenomenon accounts for the region of the heart being as sonorous as any other part of the chest, which is not usually the case.

III.

SURGERY.

1. *Supposed Fracture of the Basis Cranii.** H. Gilchrist, aged 50, a labourer, was suddenly thrown from a brewer's cart, on the evening of the 8th of May, 1821, and fell insensible to the ground. On being raised, blood was seen to issue from his ears to a considerable extent. Two hours after the accident, he was seen by Mr. Macfarlan, and the following symptoms noted.

"He is somewhat comatose, but, when roused and spoken to, answers, though not very distinctly, and rather incoherently. Complains of pain of head, especially when touched, and chiefly behind the right ear, where there is an evident softness, and slight fulness; but no depression of bone, nor other injury, can

* J. F. Macfarlan, Esq. Ed. Transactions, vol. I.

be discovered in any part of the cranium. There is no external wound. The right eye seems sunk in the orbit; whilst the superior palpebra is partially paralysed: both pupils are dilated, but contract readily on the approach of light. There is still a considerable hæmorrhage from both ears, the blood flowing in a constant small stream. He also complains of pain of the side, when touched, near the cartilage of the fourth rib, but no injury can be perceived. Has had some vomiting. Pulse 48. Skin cool." 652.

He was visited again in two hours, when he was found in nearly the same state, but more easily roused. There appeared to be no loss of muscular power, as he was impatient of control, and was kept in bed with difficulty. Twenty-five ounces of blood were taken from the arm, after which the pulse rose to 57. 9th. Passed a tolerably quiet night, though with some retching and startings—hæmorrhage from the ears continues—complains of his head—no motion of his bowels. Temporal arteriotomy to fourteen ounces—head shaved, and cold applied. 10th. Was delirious last night—pulse 50, and feeble. 11th. A bad night—headache—pulse 50—no evacuation yet—venesection to twelve ounces—five grains of calomel and ten of jalap. 12th. A bad night—answers questions more distinctly—pulse 50, and irregular—bowels open. 13th. A good night. 15th. A restless night, with low delirium—pupils dilated—pulse 64—passed urine involuntarily. 18th. A bad night, with constant delirious muttering—urine and fæces passed in bed—eighteen ounces of blood from the arm—pulse 120, and feeble—some paralysis of the face. After several days of changeable and formidable symptoms, appearances became better, and he recovered to a certain extent. His memory, judgment, and corporeal powers being still much impaired.

"The case, as I have hinted, appears to belong to that particular species of counter-fracture first described by Dr. Thomson, in the 8th volume of the Edinburgh Medical and Surgical Journal. All the leading symptoms mentioned by this acute observer, such as hæmorrhage from the ears, stupor, and diminished frequency of the pulse, were present; and when to these we add other subordinate circumstances of the case, namely, the sunk appearance of the right eye, the swelling and discoloration behind the ears, the paralysis of the face, the involuntary discharge of fæces and urine, together with the derangement of the intellectual faculties—little doubt, I imagine can remain, but that such was the true nature of the injury. From the foregoing narrative, therefore, encouragement is given to our perseverance in affording relief, even under the cheerless prospects that this variety of accident generally presents." 657.

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2. *Treatment of Hernia.** Twenty-four cases of strangulated hernia have presented themselves to Mr. Yeatman, and all been

* Mr. J. C. Yeatman. Med. and Phys. Journal, Jan. 1825.

treated with success. Twenty one of these were reduced by the taxis and remedial measures: while three were operated on at an early period of strangulation. Fifteen of the twenty-four were cured by venesection—the application of cold—and the taxis—six cases by the above means, in addition to five grains of opium, exhibited at one dose internally. In all the cases, the gut had been strangulated from one to five hours. Each patient was immediately bled *ad deliquium*—then placed on the floor of the room, on a blanket, with pillows to raise the pelvis, and the taxis managed in the usual way. Pails of cold water, with ice, or muriate of soda and ammonia dissolved in water, were placed by the side of the patient, and poured on the hernial tumour, at the distance of two feet, from the spout of a large tea-pot, or small tea-kettle, for a space of time varying from an hour to an hour and a half—occasionally employing the taxis for a few minutes together. When this mode of treatment failed of success, five grains of opium were given in each case—the patient put to bed—and the taxis had recourse to during the profound sleep that followed. The above were the only means employed by our author—and always with success. With respect to the operation, he considers it disgraceful to a surgeon to find the contents of the hernial sac in a state approaching gangrene—when he might have operated sooner. But, says he, all the remedies which have ever been recommended, are generally put first in execution, and many hours and days are thus suffered to elapse "in imbecile and reckless attempts to return the inflamed, enlarged, and strictured parts into the abdominal cavity."

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3. *Iritis.** We can only touch on two of the points discussed by Dr. Robertson—namely, the etiology and treatment of the disease in question. He observes that almost all authors have been surprised that "mercury both causes and cures iritis," and so they might, he thinks, were this a fact. It appears to him that "mercury *alone never* causes the disease." It may act as a *predisposing*, but not as an *exciting* cause. Mercury renders the constitution more liable to the impressions of *cold*—this last being the most frequent cause of iritis. The following are the facts on which our author grounds his conclusion.

"1st. The greater number of patients that I have had an opportunity of seeing affected with iritis, while their systems were under the influence of mercury, were conscious of having been exposed to cold shortly before the attack.

"2nd. In those cases, other effects, considered as arising from cold alone, were present, such as an increased discharge from the nares and fauces, rawness of the throat, &c.

"3rd. Inflammatory affections of other organs are frequently caused by exposure to cold, under similar circumstances; as inflammation of the lungs, bronchiæ, and intestines, none of which

* Dr. J. A. Robertson. Ed. Journal, Jan. 1825.

have ever been considered as produced by mercury alone ; and lastly,

"4thly. In the greater number of iritic cases that have been under my care, the patients neither were, nor had lately been under the influence of mercury, and nearly all of them attributed the complaint to cold. Besides, if mercury caused iritis, this disease ought to have been of more frequent occurrence some years ago, when ten times as much mercury was used as now a days : but I do not find that this was the case." 34.

Treatment. At the commencement of the attack, blood-letting is the first remedy to be employed—the quantity being proportioned to the effects produced on the system, and on the disease.—When the system has been sufficiently lowered, we should have recourse to topical bleeding and blistering.

"The medicine, however, that is chiefly to be relied on in iritis, is mercury. And to Dr. Farre, who was the first in this country who introduced the use of mercury in iritis, we are indebted for this most important improvement in the treatment of this disease. But the use of this medicine in iritis was known to Beer, Benedict, and other German oculists, long before its introduction into this country. In iritis, the system is to be affected with mercury as rapidly as possible ; for this purpose, in severe cases, I frequently order two mercurial pills to be taken every hour combined with opium, if they affect the bowels with griping or purging. The supra-orbital region is to be well rubbed twice a day with mercurial ointment, mixed with powdered opium. The relief from pain which the patient often experiences from the latter application is quite astonishing. As soon as the system becomes affected with mercury, the patient experiences a very considerable abatement of the pain and feeling of fulness and distension of the eye. The sight becomes clearer, and the irregular and contracted state of the pupil and the effused lymph begin to disappear.—The redness of the external part diminishes, and the iris assumes its natural colour. These effects are almost invariable ; indeed, I do not remember a single case in which the pain was not relieved as soon as the system was affected." 36.

When lymph has been effused, mercury is indispensable—it is the only remedy which can be of any service. It is to be aided by the application of belladonna, or hyoscyamus externally.

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4. *Mental Imbecility from Injury of a Nerve.** A young man, 14 years of age, of plethoric habit and nervous temperament, received an injury on the top of the foot, from a stone thrown with violence by one of his play-mates. By this accident, a portion of the anterior tibial nerve, situated between the metatarsal bone of the great toe and the adjoining one, was contused. Only a slight degree of pain at first occurred, and that upon motion. About

* Dr. James Anderson. New-York Medical and Physical Journal, No. 4.

eight or ten weeks after the accident, the pain increased, accompanied by a slight swelling of the part, and also an extension of the pain to the ankle and leg. Lotions, fomentations, and rest did no good, and the disease increased in violence, extending up along the trunk of the nerve, and affecting the adjacent muscles with spasms. The constitution now became involved in the irritation —the pulse increased in frequency and force, but the digestive organs continued in good order. The pain extended above the knee, and was almost insupportable. Large doses of assafœtida, conium, and even belladonna produced no sensible relief. The symptoms became more formidable—the spasmodic action of the extensor longus pollicis pedis drew the great toe perpendicular to the surface of the foot—and the slightest motion or touch would excite excruciating pain, lasting from three to five minutes. At the end of three months from the accident, the whole nervous system became involved in these spasmodic irritations, and the intellect began to suffer. The unfortunate patient lost the power of reasoning and recollection—was unable to distinguish visitors, or recognise his parents—in fact, his mind became idiotic. The pain, however, now extended up along and beyond the thigh, affecting spasmodically the muscles of respiration. Though his distress was most acute, yet he gave no utterance to his feelings.—"While the paroxysms were on him, he would roll his fist, and imitate the actions of a pugilist, but with much greater violence and rapidity, often striking his nearest and best friends, and all around him." It was now determined to make a division of the anterior tibial nerve, as a last resource. It was accordingly divided above the ankle, from a belief that it would more effectually cut off the connexion between the injured part and the nervous system at large. An incision was made about two inches in length, just on the outside of the tibia, and a separation made between the extensor longus pollicis pedis and the tibialis anticus, down to the artery and nerve. The latter was divided by a bistoury, and about an inch of it cut out. The extensor muscle of the great toe became immediately so relaxed, as to allow the toe to resume its natural situation by the side of the other toes. There was also an almost immediate alleviation of all those extraordinay morbid phenomena that had exhibited themselves in the unfortunate sufferer. The local affections became less distressing and in a short time, wholly disappeared. He has since enjoyed good health.

Although Dr. Anderson does not mention any thing about the return of sound intellect, we take it for granted that this was the case, otherwise he would not have stated the enjoyment of *good health*. The case affords a curious instance of the power of a local affection in deranging the health of body and mind.

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5. Ophthalmia. In a report of ocular diseases from Mr. Melin, assistant surgeon to the forces, and on duty at the General Hospital, Fort Pitt, we find a novel method of treating ophthalmia, which we sincerely hope will prove efficacious in the hands of other

practitioners. There is something revolting in the practice of detracting large quantities of blood from the general system for the removal of a purely local inflammation. Any mode of curing ophthalmia therefore, by local means, is a desideratum. The disease, as it occurred at Chatham, was certainly mild, comparatively speaking, and did not present itself in the form commonly called Egyptian.—From having witnessed the good effects of a solution of lunar caustic, in allaying the pain and suppressing the discharge of gonorrhœa, Mr. Melin was led to try its effects in inflammation of the conjunctiva, a membrane similar to that lining the urethra, and where stricture was not to be dreaded. The opportunity soon offered of putting his ideas into action. Four grains of the caustic were dissolved in the ounce of distilled water, a little of which was dropped into the eye twice a day. It excited pain, and a sensation of roughness, with an increased flow of tears, for about ten or twenty minutes, after which the eye felt much relieved, and in a few days the cure was effected. In this way he has treated nearly 300 cases of acute ophthalmia, some of them of a severe nature, without either local or general bleeding. "One very material advantage attending this mode of treatment is, that the inflammation is subdued without leaving any chronic disease, either in the eyeballs or lids." This is not always the case when the antiphlogistic plan is employed. Some of his professional friends have given the method in question a trial, and with similar success. It is proper to observe that, where there is deep-seated pain, and suspicion of iritic inflammation, depletion must be employed. It is to the conjunctival inflammation that the caustic treatment is applicable. —*Med. and Phys. Journ. Sept.* 1824.

In the October number of the same Journal, Mr. Melin continues his ophthalmic report.

Iritis. Five cases of this complaint were admitted, of which three were cured, and two invalided. In the latter, the eyes were disorganized or the retina insensible before the patients came into hospital. In these cases of iritis, as well as in others, our author immediately commenced the use of mercury, giving two grains of calomel with a quarter of a grain of opium every two hours, until the mouth became affected; "on which a visible and marked improvement took place in the disease. The aqueous humour became clear, the absorption of effused lymph commenced, and the pupil recovered its round form."

"Indeed, I know of no complaint in which the action of medicine is so clearly and beautifully seen as in this. I shall not enter into the question of the various species of iritis, whether idiopathic, syphilitic, or mercurial; but, in whatever form it appears, or whatever cause produces it, I must express my unqualified confidence in the power of mercury (when properly and judiciously administered,) to arrest its progress, and effect its cure. In general, I consider that, the more rapidly the system is placed under its influence, the better; and I have always commenced with two grains of calomel and a quarter of a grain of opium, in a pill, every

two hours. But a case has lately occurred here, in a poor patient who applied for my advice, which will lead me to increase the quantity when next I meet with the complaint. The eye was painful, the sclerotic coat very vascular, the pupil irregular, the aqueous humour turbid, and a small quantity of lymph effused into the anterior chamber. I directed him to take the pills as above; and the next day he called on me, when, to my surprise, the eye was nearly perfectly recovered, and his mouth very sore. On inquiring I found that, by mistake, he had taken two pills every two hours. I ordered him to discontinue the pills, and directed a wash for the mouth; and on the following day there was no sign of the disease." 272.

A very curious case of periodical iritis is related by Mr. Melin, which is worthy of attention. The patient was of delicate habit, and had recently been discharged from the medical division for a rheumatic attack. The iritis came on 14 days after being stopped by calomel and opium—then ten—then nine,—and afterwards, every seven days after its arrest. The periodocity of the complaint was now so unequivocal, that Mr. Melin had recourse to the bark. Still it returned on the 7th day, but was less severe, and continued to do so regularly for three weeks The liquor arsenicalis was then administered. This medicine had the desired effect, as only two slight weekly paroxysms occurred afterwards.

Ulcers of the Cornea. When these were of a spreading nature, our author paid particular attention to the general health, as in most cases they depended on it. They principally occurred in week and delicate constitutions, or where the system had been much lowered by bleeding, purging, &c. In such cases, much benefit was derived, after clearing the primæ viæ, from bark and mineral acids, and gently touching the edges of the ulcers with a piece of caustic scraped to a fine point. When the ulcers were very irritable, he directed the eye to be held over the vapour of boiling water, to which were added some tincture of opium and camphor mixture. This generally afforded much relief.

At the conclusion of his ophthalmic report, Mr. Melin has the gratification to add that, out of 568 cases of disease, there was not an eye lost, nor one impaired, that was not irrecoverably so before admission into hospital. In 37 cases of operation, only one could be said to have fairly failed, This report forms a good appendix to the ophthalmic article in this number of our Journal, furnished from the works of Dr. O'Halloran and Mr. Hewson.

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6. *Anchylosis of the Jaws.* Mr. Snell relates a curious case of this kind, which he lately met with in the country. A little girl, eight years of age, had her jaws completely locked for two years past. A tumour having formed on the left side of the lower jaw, some practitioner rather incautiously attempted to cure it by pressure, for which purpose "he bound up the head and jaw tightly with a bandage and compress." Inflammation having attack the jaw and face, complete anchylosis of the joints

of the jaw, was the ultimate consequence. Notwithstanding this state, the little girl was the picture of health, and managed to rub in very quickly a sufficient quantity of bread and butter through the interstices of the teeth, to satisfy nature and preserve health. Milk, her only drink, was readily sucked in through the same channels. By extracting some of the temporary front teeth, the little patient became so satisfied with her increased (though temporary) facility in eating, that she refused any further mechanical aid.—*Med. Repos. Feb.*

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7. *Recto-vesical Lithotomy.* This operation was first practised in France, where it has been very coldly received. It was imported into Italy, and there it seems to take root and thrive. It has been practised at Turin, Genoa, Milan, Pisa, but in different modes. Some surgeons have abandoned it after trial—others have written against it on theoretical grounds, and without trial—while the great number who have performed it, give it the preference to either the lateral or the high operation. There are some solid and important facts connected with this subject, which are not undeserving of attention. The following are some of them. Of 69 who have undergone the recto-vesical operation, 13 have died, or rather less than one in five. Of these 13, seven are asserted to have died of affections totally independent of the operation, 56 have been cured—but out of these 56, there are eight with fistulous openings. Of these eight, one had the lower part of the bladder (le bas-fond de la vessie) incised. Forty-eight therefore have been cured without fistula, in four of which the "bas-fond" had also been injured. The period of recovery varied from ten or twelve days to seven months. Seven were cured between the eighth and fifteenth day—twenty-eight between the fifteenth and thirtieth day—ten between the 30th and 60th day—and eleven between the 60th day and seven months.

The principal advantages of the recto-vesical operation are considered to be—the impossibility of wounding the pudic artery—the absence of hæmorrhage during and subsequent to the operation—the facility of extracting the largest calculi—the little risk of urinous infiltrations. On the other hand, the serious inconveniences of this operation are candidly stated, and are as follows:—the wounding of the seminal vessels—and the chance of recto-vesical fistula. It is yet to be proved that the *first* accident entails impotence.* In respect to the *latter*, it is said that it will be very rare where the incision does not go beyond the limits of the prostate gland. It will be frequent, but not *inevitable* in those cases where the incision reaches the lower part (bas-fond) of the bladder. In the lateral operation, there is little danger of either fistula or

* We know an instance where, after a successful lithotomy in the lateral way, the seminal vessels have been obliterated, and all communication with the urethra cut off. The inconveniences are rather distressing, though the gentleman is upwards of 70 years of age. It is probable that inflammation about the verumontanum was the cause of this occlusion of the seminal vessels—*Rev.*

wound of the seminal vessels; but then there are other dangers and inconveniences, viz. 1mo Injury of the rectum—an accident by no means extremely rare, even in the hands of the most expert operators. 2ndo. Hæmorrhage, examples of which are, unfortunately, but too frequent—and generally mortal where the pudic artery is divided. 3tio The impossibility of extracting a very large stone by the lateral operation. 4to. The greater mortality by the lateral than by the recto-vesical operation. This parallel M. Breschet has drawn from the memoirs of Vacca and others in Italy, and he comes to the conclusion that—the recto-vesical operation is, or appears to be, preferable to the lateral—and that it ought to be more frequently practised than it now is in France.—*Archives Generales, Juillet*, 1824.

P. S. As many of the readers of this series may not be acquainted with the method of performing the recto-vesical operation we shall give a very short description of it in this place, in the words of a transatlantic writer, Dr. Muter, of New York, formerly of Wisbeach in Cambridgeshire, who has published a little work on the subject of Lithotomy, which does much credit to his judgment as an ingenious surgeon. There are two modes of performing this operation, one of which may be called the high, and the other the low recto-vesical incision. The former, we believe is now seldom practised. It consists in an incision made through the rectum and bladder, above the sphincter of the one, and prostate of the other, into the slit or groove of the staff, in the place where the bladder is punctured for suppression of urine—cutting a little to one side, to avoid wounding a small artery which runs along the middle of the anterior surface of the rectum.

"There is another situation, says Dr. Muter, towards the verge of the anus and perineum, where a somewhat different operation may be performed, and a very large stone extracted. If I have maintained that a stone of small size only, ought to be extracted by the last, by this, I now assert that *only a large one* should be extracted."

"We are told by Professor Vacca, that the fæces may be excluded from entering the bladder, by this mode of forming a valve of the rectum, opposite the wound in the prostate and neck of the bladder. The incision is to be made anterior to the prostate, and carried through the rectum, urethra, and sphincter of the anus, an inch into the perineum, cutting along the slit in the staff. The surgeon then runs the knife along the groove in the staff, and dividing the prostate and cellular membrane, leaves the rectum uncut. This valve of the rectum extends about an inch lower than the opening into the bladder." Dr. Muter observes that, it must be exceedingly difficult to avoid including the rectum also in this incision, in which case there would be no valve. And, even granting that the surgeon succeeds in forming the valve, Dr. M. thinks that it would be in the way of extracting a large stone, forming a stricture of the wound, and impeding the exit of the cal-

culus. Besides this, it would, he thinks, be very liable to be torn. The above objections of Dr. Muter, let it be remembered, are not from actual experience of their validity, but from reasoning on the subject.

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8. *Staphyloma cured by Tapping.** Dr Richard Martland has related a case of this kind, of which we shall present some of the particulars. J. Snape, ætat. 38, was afflicted with severe pain in the head, while in his Majesty's service at Gibraltar, in 1812, terminating in quotidian intermittent, of two months' duration. In April 1820, Dr. M. was consulted, and found a cataract of both eyes. In October he cut up the lens of the right eye, and pushed a small portion through the pupil. The operation was repeated twice, and with complete success. On the 14th December, an oculist extended the cataract from the *left* eye, with some difficulty, owing to a partial adhesion of the capsule to the iris, which was unfortunately lacerated, with escape of some of the vitreous humour. Prolapsus of the iris, with violent inflammation took place the first day after the operation, and continued upwards of six weeks, leaving the patient quite blind of this eye, though very active measures had been pursued to reduce the inflammation, and the unreduced portion of the iris was destroyed by lunar caustic. He again applied on the 30th April, complaining of pain darting through the left temple and forehead, with sense of throbbing as well as of pain at the bottom of the orbit of the left eye. The conjunctiva was very vascular, and a large tumour was situated on the ball of the eye, opposite the external canthus, when the eye was directed to the opposite side. The tumour resembled that of the sclerotic coat delineated in Travers's Synopsis, pl. 1. fig. 7, but was rather broader at its base and of a deeper colour. The iris lay very near the cornea, and had become adherent to it where the incision was made. After some preparatory measures, the eye was tapped by means of a small cataract needle, and some of the vitreous humour escaped. The pain was relieved in half an hour; but recurred in the night as bad as ever. The inflammation of the eye became more extensive, and the tumour increased in size. Bleeding, purging—calomel, opium and antimony. In about three weeks another puncture was made, and a considerable quantity of viscid fluid escaped, with much relief. The inflammation now subsided, and the man resumed his trade of weaving. In a few days the tumour again filled (there were now two of them) and the headache returned. They were again tapped, and again much viscid fluid was evacuated, with instant relief. In a week all the bad symptoms recurred, and repetition of the paracentesis brought the usual good effects. We cannot follow the author through his diurnal detail of symptoms and operations; but on the 16th August, we observe that Dr. M. varied the paracentesis. He made a perpendicular incision through the coats of the eye, fully one third of an inch in length, and about two lines and a half

* Ed. Journal, January 1825.

from the temporal edge of the cornea. A great quantity of vitreous humour soon escaped, causing the eye to sink a good deal in the socket, and become very flabby. In spite of this the tumours soon filled again, and it was necessary to tap them six or seven times afterwards. On the 23d February, 1824, no vestige of the tumours remained, and there is a cicatrix where the incision was made. There has been no return of the pain or inflammation.

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9. *Knife Swallowing.** Our readers must remember the remarkable history of Cummings, the knife-eater, as related by Dr. Marcet and others. The present case was the more pitiable, as the knife was swallowed involuntarily. The unhappy victim was a juggler, 28 years of age, who, while feigning the swallowing of a knife, did actually swallow it, having, by accident, let it slip out of his fingers. The knife measured nine inches in length, having a bone handle, which went foremost down the œsophagus. Various attempts were made by the surgeons in Carlisle (where the accident happened) to extract the instrument, but all to no purpose. The knife could not be felt in the throat, nor yet in the region of the stomach. This happened in the evening of November 17, 1823. Although the man was dreadfully alarmed, he did not feel any considerable pain or inconvenience at first. He was directed to keep very quiet, and to take nothing but a little cold water that night. He had some sleep, and next day experienced some pain in his stomach. The handle of the knife soon became distinctly tangible a little above the umbilicus, when the stomach was empty; but on taking food or drink, the distention of the stomach prevented the knife being felt. His sufferings were not so great as might have been expected, but still his health declined and his strength became reduced. He was able to walk about a little in the day, and could sleep at night, on his back, but not on either side. The alvine evacuations were of a dark ferruginous colour: the pulse was little affected. His diet consisted of soup, gruel, and tea, taken in small quantities. He was frequently squeamish and sick at his stomach, sometimes experiencing a severe twisting pain in that organ.

Various projects of relief were made, but none put in execution. Sir Astley Cooper was consulted, and we believe, he recommended to cut down on the knife and extract it. The surgeons of the Carlisle Dispensary were of the same opinion unanimously, and we think they were right. Any attempt at extraction by the œsophagus we should consider as much worse than useless. Had the patient lived long enough for such dissolution of the blade as to allow the remains to pass the pylorus, death would, in all probability, ensue, from the entanglement of the ragged remains in the intestines, as was the case with his unfortunate predecessor, Cummings.

* Case of W. Dempster, who swallowed a table-knife, nine inches long. By Thomas Barnes, M. D. [Ed. Philosoph. Journal.]

The patient remained at Carlisle till the 28th December, when he left that place, contrary to the advice of his medical attendants, for Hammersmith. He never reached his destination. The motion of the vehicle brought on inflammation and gangrene of the stomach, of which he died at Middlewich, in Cheshire, on the 16th January 1824. No authentic account of the dissection has been published by the surgeons who opened this patient, but we hope the deficiency will be filled up, when this public call reaches the parties concerned.

A case somewhat similar to the above is quoted by Dr. Barnes from a small latin work, published at Leyden, in 1636, by Dr. Beckher. The particulars are as follow:—A young peasant swallowed a knife, with the handle of which he was irritating the fauces to provoke vomiting. He was much frightened, but yet he was able to follow his usual avocations without much inconvenience. A meeting of the faculty having been held, it was agreed that the abdomen should be opened, an incision made into the stomach, and the knife extracted. A straight incision was made in the left hypochondrium, two fingers breadth under the false ribs, through the peritoneum. The stomach subsided and slipped from the fingers, but was at length caught hold of by means of a curved needle, and drawn out of the wound. An incision was then made into the stomach, and the knife was easily extracted. The stomach immediately collapsed. The external wound was united by sutures. The patient had a quiet night—but passed some blood in his urine. The wound went on well, and on the seventh day the patient was pronounced out of danger.

We may conclude with a remark which we formerly made on the practice, now occasionally adopted, of publishing medical and surgical cases in periodical works of *general* literature. It is, we imagine, a practice of more than questionable propriety. It is little better than an advertisement in a newspaper. The proper channel is through the medical press—and he who brings professional cases before the world at large—*may* make the vulgar stare, but certainly *will* make the sensible grieve. We hope to see the practice abolished.

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10. *Retention of Urine.** On the 5th of August, Mr. Thompson was desired to visit J. Watson, aged 54 years, who had been suddenly seized with retention of urine the evening before. Various means were used to cause the urine to flow, medical and mechanical, but in vain. The bladder became much distended, reaching almost to the umbilicus, while the greatest agony was experienced by the patient. The distended bladder pressed so much on the rectum that an enema could not be thrown up, nor the bowels emptied. In this condition, delirium came on, with other threatening symptoms, and it was determined to puncture the bladder

* Mr. Thompson, Whitehaven. Repos. December, 1824.

above the pubes. The skin was first cut with a lancet, and then a large-sized trochar pushed into the bladder obliquely. Nearly a chamber-potful of urine was drawn off. A flexible catheter was then passed through the canula, and both the instruments secured by a tape round the body. The urine flowed entirely by the tubes for six days, at the end of which a little was made in the natural way. In three weeks, the instruments were removed, the whole of the urine now passing *per vias naturales*, and that in a fuller stream than he had seen for some years.

Mr. Thompson makes some remarks on the three ways of puncturing the bladder, preferring that above the pubes to that by the rectum or through the perineum. He recommends that the trochar be either pushed at once into the bladder, or a small puncture first made with the lancet, so that the skin and integuments shall afterwards grasp the canula, and prevent the escape of water by the sides of the tube.

From what we have seen ourselves, we decidedly prefer the suprapubian operation. But we may remark that, when the retention of urine arises, which is generally the case, from a stricture in the urethra, there is no occasion to puncture the bladder at all. An opening should be made in perineo, and the urethra pierced behind the obstruction. This wound will afterwards heal, by proper care, when the urine finds its natural course.

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11. *Paracentesis Capitis.** We have long been of opinion, that where hydrocephalus has proceeded so far as to admit the operation of tapping, it is incurable. The following case, published by Mr. Money, will not weaken this position.

J. R. Hunt, ten months old, came under Mr. Money's care on the 15th October, 1822. Even at birth his head was unusually large, and the size gradually increased—his health became deranged—and medical advice was sought. Under Dr. Webster's care the general health was restored, but the head still increasing in size, Dr. W. considered the case hopeless, and Mr. Money, by and with the advice of council, determined on paracentesis capitis. The relative weights of the head and body at this time (as ascertained without decapitation) was as follows:—body 14 pounds 10 ounces—head six pounds and a half.—The various admeasurements of the head we shall pass over. The temperature of the body was natural—the circulation equable—the appetite good—the bowels torpid—the urine scanty—respiration inclined to be laborious—head hot to the touch—voice weak. Fluctuation was very evident in the divisions, upon varying the posture of the head. The operation was performed on the 15th October, in the presence of his colleagues. A small, fine, and flat trocar was introduced, in a valvular direction, into the right lateral part of the fontanelle, near the sagittal suture, about an inch and a quarter in depth. The fluid flowed at first, *guttatim*, but afterwards in a gentle stream,

* Mr. Money. Med. and Phys. Journ. Dec. 1824.

without any tinge of blood. Better than four ounces were drawn off, in the space of five minutes. The child did not seem to suffer—the pulse was at 140. While the water was evacuating the eyes appeared rather more animated. The head was bandaged up after the operation. Nothing particular occurred afterwards. The child appeared to gain flesh, till the 28th, when the head was again tense, and paracentesis capitis was again performed. Three fluid ounces were evacuated this time. To make a long story short, we may state that the head was punctured eleven times within ten weeks, and nearly 40 ounces of fluid removed from the brain. He died on the 7th January 1823, in convulsions.

Dissection. The dura mater was much thickened, and adhered very firmly to the inner surface of the cranium. The pia mater was distinctly inflamed. The surface of the brain was smooth, and showed no appearance of convulsions. On cutting into its substance it was found to be only one sixth of an inch in thickness, yet composed of cortical and medullary matter. There was no vestige of corpus callosum, corpus striatum, thalamus nervi optici, fornix, or septum lucidum. "In short, the various parts usually found in the cerebrum were entirely absorbed, and the space filled up by one large bag, which was lined by an adventitious membrane exceedingly firm, and of about the thickness of ordinary writing paper." The bag was divided into cells by broad flat membranous bands, taking the course of the lobes, and contained about 35 ounces of fluid, "These bands appeared to be plexus choroides, or prolongations of the pia mater." The small apertures made by the trocar could be perceived in the adventitious membrane.—The cerebellum was firmer than usual, as also the optic nerves at the fore part of sella turcica. Nothing else worthy of notice.

This case bears, in some degree, on the question, how far the vessels of the brain can be depleted by drawing blood from the general system? It is evident that, although the punctures were made into cyst containing a large quantity of fluid, only a very small quantity comparatively could be drawn off. The reason is clear. The fluid flowed as long as the cranial envelopes continued to collapse. When the collapse ceased, the fluid refused to issue, on the common principles of hydraulics. This shows that, in the solidified or adult skull, the vessels cannot be depleted in the living body. But then the *pressure* of the blood may be greatly lessened by reducing the whole mass of circulating fluids. It is abundantly evident that no medicine or operation could be of permanent benefit in such a case as the above. Credit is nevertheless due to Mr. Money for having made the attempt, and candidly stated the result.

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12. *Paracentesis Thoracis.* [Retrospective.] Our readers will remember that in our last No. (3, p. 97) this subject was touched upon, and it was shown that Laennec was favourable to an operation in cases of watery or other fluids collected in the chest.—Sprengel has shown that the operation is one of the oldest in sur-

gery, taking its date in remote mythological periods, and from the testimony of Cicero and Pliny, owing its first introduction to chance rather than design. Thus, a certain Phalareus or Jason, having been afflicted with an ulcer in the lungs, was deemed incurable by all his physicians. Being desirous of putting an end to his life and afflictions in battle, he received a wound in the side, which wound, instead of proving fatal, opened an impostume, from which a quantity of matter flowed, and recovery was the result. Although this story is rather of the fabulous order, it at least shows that the operation was not unknown to the ancients. That such an operation may often succeed in cases of empyema, there can be little doubt, but hydrothorax is so much more generally a consequence of other organic disease, than an idiopathic affection itself, that we can have little hope of cure from the mechanical evacuation of the fluid through a wound between the ribs. One of the most remarkable instances of this kind, however, which we have read of, and which is merely alluded to by Sprengel, is related by Moraud in the Memoirs of the Royal Academy of Surgery, for the year 1752. The case was as follows :—

An ecclesiastic, 22 years of age, of good constitution, was first affected with a fever and then again with measles. The course of the measles being interrupted, a violent fever ensued, with severe affection of the chest, ending in an œdematous swelling of the left side of the body, difficulty of breathing, and other unequivocal symptoms of hydro-thorax. At this period, Moraud was called in, who gave it as his opinion that there was a collection of water in the left side of the chest, and that nothing but a surgical operation would remove it. This was agreed to, and it was performed by thrusting an ordinary trocar through one of the intercostal spaces, when water rushed out in a full stream, and to the amount of five pints and better. That which came last had a purulent appearance. The patient was instantly relieved; but in the course of a week, the bad symptoms again returned, and in another week it was necessary to have recourse to a similar operation, when five pints more of water were drawn off, mixed towards the end with purulent matter. After this operation, the urinary secretion augmented, the fever diminished, and gentle sweats came out on the surface. The disorder now took a different turn, "as he insensibly fell into so dreadful a marasmus that his life was once more despaired of." A milk and other nourishing diet, however, restored him to perfect health, in which he continued afterwards. A purulent discharge from the wound obtained for several months after the last operation.

Moraud observes that—"the water extracted from the chest being mixed with pus, there was not only a dropsy in this part, but very probably an erysipelas also, at the external surface of the lung or pleura—perhaps at both—which, in rendering the case much more dangerous, must have made the cure more difficult." There can be little doubt but that this was a simple case of inflammatory dropsy of the pleura, and that, if the operation be ever successful, it will be in such cases. The purulent matter, towards the close of each discharge, was no doubt a secretion from the inflamed pleura.

IV.

Therapœia.

Pharmaca nulla valent, nisi quæ sint commoda causis.

1. *Hæmatemesis cured by Emetics.** The practice of giving emetics in vomiting of blood is not new—but it is very rarely put in force. There is something repugnant to the feelings, or at least to the preconceptions, in giving an emetic to a man vomiting or spitting up quantities of blood. But we are, as yet, very imperfectly acquainted with the modus operandi—or even the *effects* of medicines on the human frame. Many years ago we saw a surgeon, by no means well versed either in therapeutics or pathology, exhibit a scruple of the sulphate of zinc to a man who had vomited up nearly a chamber-potful of blood, and who appeared nearly in articulo mortis. The patient vomited twice or thrice after the medicine was exhibited—but little or no blood appeared in the ejected matters, and he quickly recovered. We confess that we have not had courage enough to pursue the same practice since.

Dr. Sheridan informs us, that his father, who practised medicine with repute in the county of Cavan upwards of half a century ago, was in the habit of giving emetics of ipecacuan in cases of hæmatemesis, and that they never disappointed his expectations. Dr. Sheridan, the younger, was deterred from following his father's practice for many years; but having witnessed some fatal cases of the disease in question, he at length ventured on the remedy, and the present paper contains the particulars of five cases successfully treated. We shall give a brief outline of two or three of these cases, as they may inspire confidence in the treatment of a formidable disease.

Case 1. Jane Halpen, a young woman, complained of great oppression and pain about the præcordia, attended with violent palpitations. When our author first saw her, she had thrown up much dark-coloured blood: but the vomiting had stopped, though the præcordial oppression continued. He did not, therefore, give the emetic. On the third day, the hæmatemesis returned with violence, and was followed by great debility. On the third day from the last mentioned attack, it recurred, for the third time, and was excessive in quantity. He now exhibited thirty grains of ipecacuan. The vomiting ceased for a few minutes, but soon came on again, and blood was discharged, both grumous and fluid. She now lay in a state of the most alarming debility. No more blood issued—dropsy supervened, and was removed by aperients and diuretics.

* Dr. Edward Sheridan. Dublin Trans. vol. iv.

Case 2. A builder, much exposed to atmospheric vicissitudes, had not enjoyed good health for ten years past. He was subject to much pain and oppression about the præcordia. On the 24th December, he was seized with hæmatemesis to a great extent, attended with much palpitation, and pain across the præcordia. He had ejected more than three quarts of blood, when our author ordered an ipecacuan emetic. It rested some minutes on the stomach, and then brought off about a pint of blood, at three or four operations. "Here all the symptoms subsided: he found himself perfectly relieved: heat was gradually diffused over his whole surface, which had been cold before. He fell asleep: a gentle perspiration ensued, which continued a good part of the next day: his pulse became full, soft, and regular, and he felt himself, he said, more free from pain, oppression, or sickness, than he had been for years before. On the day after I gave him a mercurial purge, which brought away a great quantity of such matter as he had vomited, with this difference, that it was blacker, and resembled the discharges in melæna. He continued to improve, but was still weak: in this state, contrary to the most positive injunctions, he made too free, and the pain across the præcordia, the oppression, &c. returned. Under these circumstances I did not hesitate to repeat the ipecacuan: all these symptoms vanished, and he since continues to improve." 46.

Case 3. This was a relapse of the first case, after an interval of three years. When our author arrived, the poor woman had vomited more than three quarts of blood. Her anxiety was extreme —pulse scarcely perceptible—palpitation great. With difficulty an emetic was administered. After taking it, her stomach became quiet for ten minutes. She then threw up a quantity of watery and mucous fluid, but no blood. "Immediately after, all the symptoms, as if by magic, ceased."

"These cases," says our author, "with the two others which I observed in the country, have made such an impression on me, that I never can hereafter hesitate for a moment to have recourse to the ipecacuan emetic in hæmatemesis. I do not mean by this term a mere vomiting of blood, which may be produced by various causes, and in some cases of which emetics might prove very prejudicial, but the true hæmatemesis, which I think will always be sufficiently distinguished by the symptoms which have been above described." 48.

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2. *Hospital Reports.** Authentic hospital reports are always valuable, and Dr. Hosack is a man of talent and observation. This short report comprises only the diseases treated in the New York Hospital, during the months of December, January, and February

* David Hosack, New York. New York Medical and Physical Journal, No. 9.

of 1824. We shall give a very concise notice of a few of Dr. H.'s clinical observations.

1. *Amenorrhœa.* In a case of this disease, of ten years standing, which had resisted the ordinary alvetic and mercurial emenagogues, an injection, per vaginam, (thrice a day) of the aqua ammoniæ diluted with rain water—in the proportion of a drachm of the former, to eight ounces of the latter—excited a slight irritation, and in about five weeks the catamenia were restored.

2. *Intermittent Fevers.* The sulphate of quinine was successful in Dr. Hosack's hands—but more especially the supersulphate, in the following form :—

℞ Sulph. quininæ 3j.
Acid. sulph. aromat. 3ss.
Syr. Zingiberis ʒij.
Misce.

Of this mixture a tea-spoonful was given every hour; and, in every case, with the most perfect success.

3. *Phthisis.* In several cases of this disease, under Dr. Hosack, "the most decided benefit was obtained from the tonic treatment, particularly from the bitter infusion in combination with the sulphuric acid, and by the fumes of boiling tar, as recommended by Sir Alexander Crichton."

4. *Chronic Rheumatism.* Against the opprobrium medicorum, Dr. Hosack found more benefit from the tartar emetic ointment, quickened by some of the tincture lyttæ, than from any other application. With this, the limb or part affected was ordered to be rubbed three times a day. The eruption of pustules rarely failed to relieve the rheumatism.

5. *Syphilis.* Dr. Hosack prefers the oxymuriate of mercury to every other form. It certainly is not so apt to affect the mouth as calomel or the mercurial ointment—nor are patients so liable to catch cold while taking this medicine as they are under other modes of the administration of mercury.

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3. *Puerperal Peritonitis.* Mr. Davies, in a paper on this subject in the Medical Repository, professes his conviction that the disease is contagious. In the autumn of 1822, he met with twelve cases, while his medical friends in the neighbourhood did not meet with any, "or, at least, very few." He could attribute this circumstance to no other cause than his having been present at the examination, after death, of two cases, some time previous, and of his having imparted the disease to his patients, notwithstanding every precaution.

Out of these twelve patients, three died, "although the anti-

phlogistic plan, in the form of bleeding, purging, leeching, and blistering, &c. was tried to its full extent." Sedatives also were tried, in every form, with the intention of allaying the pain and the irritability of the system attending the disease—but all in vain.

"I have," says he, "in a number of instances, seen bleeding to its very fullest extent tried, followed by purging with calomel, salts, &c. yet the disease, in seven cases out of ten, gained ground, and ultimately killed the patients. I have also had an opportunity, at different times, of examining fourteen cases after death; and the appearances in all, one excepted, were similar. These appearances were, a high degree of inflammation of the peritoneum, especially that portion of it covering the back part of the uterus and front of the rectum; from a pint to two quarts of sero-purulent fluid in the bag of the peritoneum; an adventitious membrane formed on the surface of the peritoneum, glueing the intestines together in one mass; the substance of the uterus, in some cases, almost in a state of gangrene; sometimes the mucous coat of the intestines inflamed; and the arachnoid membrane of the brain inflamed in some cases."* 184.

Mr. Davies goes on to notice a method of treatment which he has found hitherto invariably successful. He had been in the habit, for some years, of treating common peritonitis, after one good bleeding, with calomel and opium, "given in pretty large doses, and repeated every two or three hours, till the gums became affected." "I can confidently assert," says he, "that since I have used that plan I have only lost one patient. In this case the remedy had no fair trial." He has tried this plan, in puerperal peritonitis, with bleeding first, and without bleeding, and he has found it to answer both ways. "But when bleeding is premised, the gums become sooner affected by the mercury, and the disease, of course, sooner gives way." He has tried this plan of treatment in nine cases successfully of puerperal peritonitis, with the best success. In seven of them bleeding was premised, and these appeared to get well sooner than the other two.

"After bleeding pretty largely, five or six grains of calomel, combined with a grain of opium, should be given every three or four hours, till the gums become decidedly affected. The calomel then should be reduced in quantity, or substituted by the blue pill, or, in some cases, left off altogether. The object in view is to keep the system slightly under the use of mercury for a few days. As soon as the pain has given way, and the mouth become a little sore, the patient may take a slight tonic, such as infusion of calombo with a little nitre dissolved in it. The bowels should be kept open by clysters till the mercury has affected the system." 186.

Leeches, blisters, and other auxiliaries, are not to be neglected.

We need hardly say, that the plan recommended by Mr. Davies is not new. We should be disposed to recommend it, from some

* Med. Repos. September 1824, p. 184.

experience of its effects, did we not know that, in the present state of feeling—

"To make a mouth sore is voted a bore,"

and that it is considered far more politic to let the lady die with a sweet breath, than have her grumbling for a fortnight that she cannot eat a crust of bread in consequence of the vile mercury.

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4. *Buchu Leaves.* (Diosma crinata.)* Dr. M'Dowell has recently related some cases of disease of the bladder treated with the remedy at the head of this article. He observes, that a chronic form of inflammation very frequently affects the mucous membrane of the bladder, and which, when neglected, extends to the ureters and kidneys, producing a train of severe local, as well as constitutional symptoms. The causes are sometimes obscure.—Sometimes they can be traced to mismanaged gonorrhœa—neglected retention of urine—disease of the prostate—stricture of the urethra—or calculous affection.

"The morbid alterations of the mucous surface of the bladder, produced by this disease, are different degrees of vascularity, from merely a few patches of a dark or a bright red colour, to an entire vascularity, in some cases so marked, as to appear as if the bladder had been daubed over with blood; the veins in general are turgid; the membrane becomes much thickened; frequently numerous ulcers form, covered with a tenacious brownish-coloured lymph; sometimes these are very numerous and deep, so as to give a honey-comb appearance to the membrane. The inflammation may run so high as to end in complete sphacelus of the interior of the bladder—I saw this in two instances. The mucous membrane generally forms numerous rugæ, which may be matted together by coagulable lymph.

"The discharges coming from a membrane, so altered by disease, are blood, in general venous, and often in very large quantity; a slimy, tenacious mucus; a powdery, white sediment; or a fetid sanious matter.

"The cellular substance under the mucous membrane becomes filled with lymph, and in consequence is liable to be much increased in depth. The muscular fibres are usually much thicker and stronger, and the intervals between them may be filled with lymph: occasionally small abscesses form in the muscular parietes. In one instance I saw an abscess formed between the muscular layer and peritoneal coat, which attained considerable size, and apparently was caused by irritation from a long continued disease of the mucous membrane.

"The constitutional symptoms attendant on the disease, great derangement of the digestive organs, as indicated by loss of appetite; thirst, often very urgent; tongue white, or loaded with a yellowish brown mucus; nausea, sometimes vomiting; a costive

* M'Dowell. Dublin Transactions, vol. iv.

state of the bowels; fæces usually dark coloured; a harsh dry skin, and emaciation." 133.

The cases detailed are only three in number.

Case 1. Was hopeless apparently. A gentleman had been six years ill—emaciated—debilitated—paralytic of the lower extremities. He passed his urine with great difficulty, being loaded with much tenacious stringy mucus. His appetite was totally gone. After trying several remedies recommended in irritable bladder, he exhibited the infusion of buchu leaves, with tincture of the same and tincture of cubebs thrice a day. In six days the patient's appetite was improved, his strength increased—the mucus in his urine diminished—the ability to retain his water augmented. He continued to improve for a considerable time; but it appears that he relapsed—ostensibly because he could not procure buchu leaves.

Case 2. Philip Dwyer, aged 67 years, sallow complexion, emaciated, ill for three years. Complains of severe pain in the pubic region, particularly before he passes water. Great irritability of bladder, passing water in small quantities every quarter or half hour during the night: during the day can occasionally retain it for two hours. Less irritability when using much walking exercise; when sitting is affected with a stinging or scalding sensation in the prostatic region. Urine generally white or muddy. Frequently passes a large quantity of a slimy, pale, yellow-coloured mucus, voided with great difficulty, and soon putrefying: is much relieved by its expulsion from the bladder. Is greatly debilitated, and has lost much weight. Tongue loaded with yellowish mucus. Thirst. No appetite. Bowels generally constipated, stools black. No enlargement of the prostate could be felt.

The disease had commenced three years previously. The following mixture was ordered.

℞ Infus. buchu ℥vij.
Tinct. ejusdem.
——— cubebæ āā ℥j.

Capiat ℥j ter in die. This was continued from the 20th May till the 4th August, when he reported himself as able to follow his daily avocation of a labourer.

We have never employed this medicine. But we are acquainted with a very old gentleman who has had catarrhus vesicæ for many years, and who assures us that he has derived great benefit from what he calls his buchu tea. In a disease so troublesome and difficult of cure, the remedy is worth trial.

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5. *Tartar Emetic Ointment in Epilepsy.* In the 4th volume of the Dublin Transactions, Mr. John Creighton has detailed six cases of epilepsy relieved greatly, though not cured, by tartar emetic

ointment. Into the Foundling Hospital of Dublin many children are admitted who are affected with epilepsy. This excited the attention of the medical attendants, and some of the worst cases were subjected to the treatment in question. Two of the cases had been rendered perfect idiots by the frequent recurrence of the paroxysms, and others laboured under such aberration of mind as to be but a few degrees removed from the same degraded state. Although a complete cure was, in no instance, effected, "yet we have (says Mr. C.) the satisfaction to state that the fits are now, in each patient, comparatively of rare occurrence, and are of so mild a character, as not to interfere with the health or strength of the individual." Indeed, these hitherto helpless objects are now capable of applying themselves to various useful employments, and are no longer a burthen to the institution.

Each patient was allowed to remain a certain time in the infirmary before the use of the ointment was commenced, both to enable the medical officers to ascertain the time of recurrence and duration of each fit, and also to submit them to an antiphlogistic regimen. This last had no influence whatever on the disease itself, and was suggested merely from the plethoric habit of body which appeared in all of them on first coming into the infirmary. The eruption varied much as to its first appearance, sometimes coming forth in 24 hours, sometimes not for 3 or 4 days. The eruption was not confined to the part where the ointment was rubbed. Our author says, that "*it most frequently appears in very remote parts.*" From having used the ointment in some hundred instances, we can confidently aver that it does not appear remotely in one instance in ten. The cases of epilepsy we need not detail. It is remarked, in conclusion, by Mr. Creighton, that the tartar emetic ointment has been used at the Foundling Hospital in every case of hooping cough, during the last year, with evident good effect. The paroxysms were diminished not only in violence and frequency, but the progress of the disease so much shortened that, in no instance, did it continue more than three weeks. The application of the ointment was along the spine.

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6. *Nitre extracted from the Stomach.* Mr. Ferrall (of Dublin) was called to a gentleman who had, by mistake, swallowed rather more than an ounce of nitre. Mr. F. took with him Mr. Jukes's apparatus, and arrived at the patient's house 20 minutes after the accident. The patient was pale, and covered with cold sweat—complained of painful sense of heat along the centre of the chest to the stomach, with a constriction of breathing. He was directed to drink a large quantity of sugar and water, while the surgeon was preparing the instrument. The point of the flexible tube was then passed cautiously between the velum pendulum palati and base of the tongue till it reached the posterior wall of the pharynx. On pressing the instrument down through the œsophagus, the surrounding muscles were thrown into strong action, but this was steadily overcome. When the operator was preparing to exhaust,

a violent paroxysm of coughing was induced by the pressure of the tube on the glottis or epiglottis. It was, therefore, kept raised above and behind that sensible part, and the contents of the stomach were speedily drawn off. He then disengaged the syringe, filled it with sugar and water, and injected its contents into the stomach, evacuating it again by the same channel. The patient was fatigued, but not so much so as after the operation of an emetic. He experienced no further inconvenience except a slight rawness in the throat, and speedily recovered.—*Med. Repos. Sept.*

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7. *Sulphate of Quinine.** The efficacy of this remedy, and its great superiority over every other form of bark, are now almost beyond a doubt. Dr. Barker, while in attendance at Sir Patrick Dunn's hospital, took an opportunity of ascertaining the power of sulphate of quinine in curing intermittent fever, and has presented us with a synoptical table of the results in thirty cases of the disease. Of these thirty cases, not one resisted the remedy. In a majority of instances, the paroxyms ceased within a day or two after the first dose was taken. As a part of the object was to determine the smallest quantity capable of effecting a cure, very small doses were employed in many cases. Although the point is not completely ascertained, yet it was, at least, proved that a grain or less, taken three or four times a day, was as efficacious as larger doses. In one instance, half a grain three times a day suspended the paroxysms for eight days. In no case did it disagree with the stomach. Rejecting a few cases in the table, in which a large quantity of the sulphate was given, we find the average quantity to amount to somewhat more than nine grains. As it is of much consequence to the practitioner to ascertain that this medicine is genuine, we shall subjoin the following characteristics, as drawn up by Dr. Barker:

"When exposed to heat on a slip of platina foil, it melts like wax, it then blackens, partly rises, and burns, with flame. It requires at least three hundred times its weight of water for solution; much more of it is taken up by hot than by cold water, from which it crystallizes in prisms. It is much more soluble in alcohol than in water, dissolving in a quantity of rectified spirit, of spec. grav. 840, amounting to about forty times its weight. Its aqueous solution is decomposed by several reagents. Soluble barytic salts, as might be expected, render it turbid; but I have not observed any reagent to produce so striking an effect as *iodine*. I have found a very minute quantity of this substance in water; for example, a grain of iodine heated in a drachm or two of water, to produce in the watery solution of the sulphate of quina, a copious precipitate of a cinnamon-brown colour. This precipitate dissolves on heating the liquor: it is also soluble in rectified spirit, and is again thrown down by water. The tincture of iodine may be also

* Dr. Francis Barker. Dublin Trans. vol. IV.

applied as a test of the sulphate of quina; this tincture is partly decomposed by water, but the colour of the precipitate is quite different from that produced by the sulphate of quina, which in colour very much resembles the Peruvian bark.

To the above may be added its intensely bitter taste. But we would advise that the medicine be procured from none but the most respectable chemists, as the temptation to adulterate must be considerable on account of its price." 272.

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8. *Constipation.** There are few medical men unaware of the bad effects which generally results from habitual constipation. But there are comparatively few who know to what extent accumulations of fæcal matters will take place in the colon, and how long they will remain there unsuspected by either patient or practitioner. The two cases related to Dr. Borthwick may be taken as illustrations.

1. The first was an English lady who, three years previously, had been sent to Madeira for incipient phthisis, having severe pain in both sides, cough, dyspnœa, and emaciation. After a year's residence at Madeira, these symptoms vanished, and she returned home apparently cured. Soon after her return to England, where she married, she was assailed by the same train of symptoms which had forced her to Madeira before. At this period, Dr. B. was consulted, and on a *prima facie* inspection, put down phthisis in his own mind, as the character of the disease. On a more minute examination, he was gratified to find the pulse only 70—the eye tinged yellow—the tongue loaded—no appetite—bitter taste in the mouth—bowels constipated—and the *pain* seated in the region of the *caput coli*, and also in the sigmoid flexure of the colon. Under these circumstances, it was obvious that the source of the cough was under, rather than above the diaphragm, and his opinion was given accordingly, though not credited by the patient or friends at first. Three days' active purgation unloaded the bowels of prodigious quantities of indurated fæces, when the pectoral symptoms vanished, of course.

2. The second case was also that of a lady, who had long been subject to what she termed cramp in the stomach, which was generally of short duration, though violent in degree. On the present occasion, the attack was of a more obstinate character, and resisted the means usually put in force. Our author found the patient sitting up in bed, with pale countenance, cold clammy sweats, tongue brown and parched, thirst urgent, pulse 80. On examination of the abdomen, the track of the colon loaded with indurated fæces could be painly felt. The practice was obvious. As soon as the irritability was assuaged by the warm bath, and spirituous fomentations, a dose of castor oil was administered, which passed through, without removing any of the scybalæ. It was the same

* Dr. Borthwick. Ed. Journal, Jan. 1825.

with a dose of salts. Fifteen grains of the compound extract of colocynth were then ordered every three hours, with a wine-glassful of saline aperient in the intervals. This plan soon dislodged the enemy in the shape of "an incredible discharge of large hardened lumps," when the "cramp in the stomach" was at an end.

We would advise the young practitioner, when he meets with cases of this kind, to *first* administer a dose of the purgative in conjunction with some opium and hyoscyamus, in order to take off spasmodic strictures from the colon—*then* to purge as actively as he pleases.

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9. *Severe Affection of the Head.** The subject of this communication was a young lady, ten years of age, and previously healthy, who was seized with head-ache, vomiting, and febrile symptoms, in the latter end of September 1821. Measles were suspected, and antiphlogistic measures were employed. On the 7th of October, strabismus was observed—on the 8th, a universal spasm came on—the muscles of the face were all in unnatural action—the eyes turned inwards—the angles of the mouth drawn alternately on either side—the muscles of the trunk, and extremities convulsed—the child herself insensible, and resembling a person in a protracted paroxysm of epilepsy. "Both temporal arteries were opened without loss of time; after some blood had flowed, the appearance of the eyes became natural, and the little patient became sensible, and complained of pain in her head. Twelve leeches were next applied to the neck, the head shaved, and subsequently blistered, whilst powders with calomel and scammony were given at intervals, until stools were procured. The pulse at the commencement was 120; it was reduced by the abstraction of blood, but rose again in the evening, when ℥vi. more of blood were taken from the arm; the pulse was again reduced, and the head-ache removed." On the 9th, terebinthinate glysters were employed. In the evening, the head-ache returned, with increase of fever, and constipation of bowels: pulse 120, and full. Six ounces of blood from the arm—a stool procured by purgatives and an enema. 10th. Mercurial ointment to be rubbed on the abdomen thrice a day. 11th. Eyelids convulsed—pulse 120 to 140—frequent sighing. Ten ounces of blood from the arm did not reduce the pulse, but afforded relief to the other symptoms. The blood was buffed and cupped. On the 13th, six ounces of blood were abstracted, and exhibited the cupped and buffy appearance. On the 17th, after a good night, she awoke flushed, with the right eyelid hanging relaxed. Twenty leeches to the temples. 18th, Pulse 100, eyes clear—eye-lids natural. Two large stools—mercurial friction discontinued. From this period she convalesced. She lost in all 50 ounces of blood—took 120 grains of calomel in her purgative powders, and had an ounce of mercurial ointment rubbed in. In six similar cases, which our author had under his charge the result was successful, under a system of co-

* Dr. John Beatty. Dublin Transactions, Vol. IV.

pious sanguineous depletion. We are ready to agree with our author that "had not a very active practice been employed, hydrocephalic effusion, and consequently a fatal termination, would have been the result." A child of the same family had been carried off the preceding year, by decided hydrocephalus, in whom the disease commenced with precisely similar symptoms.

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10. *Datura Stramonium.** Little attention was paid, in this country, to this powerful narcotic, till Dr. Mariet's paper on the subject appeared in 1816. Dr. Stork employed it at Vienna, in cases of mania, epilepsy, and convulsive diseases, many years previously. The inhalation of the fumes of stramonium was much employed in this country, some years ago, in spasmodic asthma, and we have seen several instances of its efficacy in this distressing disease. It has also been used a good deal in painful affections of the nerves. Dr. Begbie considers the narcotic properties of the medicine as decidedly superior, in some cases, to those of other medicines of that class. In no case did he perceive any bad effect. A temporary unpleasant nervous sensation in the throat was observed in one case. The form used was Mr. Hudson's extract from the seeds—the dose being ¼ of a grain repeated every third or fourth hour during the day. In no instance was the dose raised above half a grain. We shall now proceed to lay before the reader some account of the cases.

Case 1. Mrs. W. aged 43, of delicate habit, went to bed, 14th March 1821, in perfect health, but was soon seized with a violent pain in the occiput, followed by flashing of light, tinnitus aurium, and strong pulsation down the neck. When seen she was pacing the room in great agitation, exclaiming "oh! my head." She soon became faint, sick, and vomited. The surface was cold—the face pale—pulse 80—pupils natural—bowels open. Ten ounces of blood from the arm—a brisk purgative—cold to the head. 15th. Symptoms unabated. A vein opened, but syncope approached, and only six ounces of blood abstracted. The pain and throbbing continued undiminished. In the course of the day, the temporal artery was twice opened, and 24 ounces of blood drawn off, with some relief. 16th. Had a restless night—pain violent all over the head, with strong pulsation at intervals. The complaint continued during the next three days without intermission. From the 19th till the 21st, the pain was principally in the neck, shooting along the whole spine, and attended with strong pulsation. It afterwards affected the upper part of the back, the patient complaining of most painful feelings of anxiety about the chest, with constant and loud yawning, and violent, but not irregular action of the heart. The pain descended, and these symptoms subsided. On the 22d and 23d, she screamed violently, from pain in the back

* Cases illustrative of the Sedative Powers of the Datura Stramonium. By James Begbie, M. D. Fellow of the Royal College of Surgeons of Edinburgh.—*Ed. Med-Chir. Trans.*—Vol. 1. p. 285, *et seq.*

of the thigh and leg, extending to the loins and back, attended with frequent slight convulsions of the limbs—the pulse was between 80 and 90, weak. 23d and 24th, had intervals of ease. She chiefly complained of burning heat in both thighs, and a pricking sensation down the limb. These increased till she could not bear the slightest pressure—but had the parts constantly exposed, or covered with ice water. By the 29th, the symptoms had gradually subsided, and there was reason to hope that the disease had run its course. Cold and large doses of opiates were the only remedies from which the patient derived advantage. On the last mentioned date the complaint returned with all its pristine violence, and the usual medicines failed entirely of success. On the 3d April, the extract of stramonium was first tried, in doses of ¼ of a grain, repeated every three hours. The first day's administration brought no relief. It was then increased to one third of a grain, and benefit was soon derived from this plan. The patient, however, was obliged to be kept under the influence of the medicine for a fortnight longer, when all symptoms of the complaint were entirely gone, and did not return.

We think the case was decidedly one of hysteria, which will frequently assume even more anomalous forms than the above. It is, however, interesting, independent of its illustration of the power of stramonium.

Case 2. W. Balcarras, aged 14, August 1st, 1821, has complained for several days of stiffness and rigidity of the lower extremities, without any assignable cause. These increased, and presently the abdomen became hard and rigid—then the muscles of the neck, back, and jaw—in short, in a few days he exhibited a well marked example of opisthotonos. Bleeding, purging, calomel, opium, and the warm bath, were employed with some relief, but only temporary. The symptoms increased, and on the 6th were at their acmé, the patient resting almost on the occiput and heels, unable to perform the slightest motion for himself—the jaws nearly shut, and fixed immoveably—abdomen as hard as a board—the extremities rigid. Very active measures were resorted to, as bleeding, blistering, sinapisms, opium, calomel, &c. and about the 9th, the symptoms seemed to yield. On the 10th they returned, nearly as bad as ever, with the exception of the trismus, which was, in some measure abated. The stramonium was now given in doses of ¼ of a grain three times a day—at first with no apparent benefit; but afterwards, when the dose was increased to one third of a grain, and more frequently repeated, advantage was evidently gained. The disease, however, continued several weeks, but he ultimately recovered in about two months.

Case 3. A woman aged 50, had complained for several days, of acute pain between the knee and foot, deep-seated, and referred to the bone. Various local applications were employed without benefit. The extract of stramonium, in quarter grain doses, every three hours, was recommended; but she left it off before benefit

could be reasonably expected. The complaint appeared to give way to large doses of carbonate of iron: but in a second attack, some weeks afterwards, the iron and other remedies failed, and recourse was had to stramonium, in doses of one third of a grain. "The relief was remarkable before many doses were taken; and in the course of a few days the symptoms disappeared."

Case 4. This was one of sciatica in a young man, where all the usual remedies proved unavailing. The stramonium was effectual in a few days. Two other cases are related by our author; but they are unsatisfactory.

Perhaps we may be excused for cautioning surgeons against the too free exhibition of this extract, in the form of suppository, in cases of painful diseases of the rectum. An hospital surgeon of celebrity, in this metropolis, prescribed *two drachms* of the extract of stramonium to be made, with some other ingredients, into six suppositories, one to be put up the rectum occasionally when in much pain. One was accordingly introduced. It dissolved, and was entirely absorbed. The patient became affected with symptoms closely resembling delirium tremens, and nearly died. *Sat verbum sapienti.*

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11. *Peculiar Convulsion in Children.** This is the complaint which we noticed at some length, [p. 452] as described by Drs. Cheyne, Clarke and others.

Mr. Cox, who was apothecary to the Royal Universal Dispensary for Children, has had opportunities of treating several cases of this curious disorder. In respect to the *name*, he would prefer calling it "cerebral croup"—the term *spasmodic croup* having been strongly objected to, "inasmuch as it tends to confound it with cynanche trachealis, from which it differs entirely in its nature." The causes of the disease under review have been considered as various. Thus teething, worms, gastric derangement, have, in their turn, been adduced in the etiological list. What has Mr. Cox to say?

"Cases of this disease have come under my notice where there has not been one symptom of gastric derangement—the belly being free from pain, and the motions perfectly healthy.† On the other hand, I have seen the disease without any symptom of cerebral affection, but with considerable derangement of the abdominal secretions, and sometimes extreme pain in the belly. The disease appears to me to consist of a convulsive action of the trachea, sometimes, but not always, attended with a convulsive action of other parts of the body, as the face, hands, or feet. This morbid action I consider as arising from cerebral irritation, which may be either symptomatic or idiopathic: when it is unattended

* Mr. Henry Cox. Med. Repos. February, 1825.

† "Hydrocephalus also sometimes occurs under these circumstances."

by symptoms of excitement of the brain, I suppose the diseased action to be transmitted through the medium of this organ, without actual inflammation existing in it. I have known it occur, in three instances, either preceded or followed by mesenteric disease. In the three instances in which I have known it prove fatal, the children all died in a fit which came on unexpectedly.—In one of those cases, although the stools had been black, brown, green, and slimy, no structural disease in the abdomen could be detected on a careful dissection: the head was not examined. In another case, the only appearance of disease was ulceration of the internal and middle coats of the small intestines: the head was not examined. I was not present at either of these examinations. Another case was attended with considerable enlargement of the head and the usual symptoms of chronic hydrocephalus: when I last saw this child, I considered it past recovery." 184.

The symptoms of this peculiar affection, we have described, when speaking of Mr. North's paper, and they need not be repeated here. But we shall introduce Mr. Cox's therapeutical observations.

"With respect to the treatment, when it appears to arise from idiopathic cerebral excitement, especially if it be attended with general convulsions, we should lose no time in the application of leeches to the temples and blisters behind the ears. I have put this mode of treatment to the test, by adopting it, and administering no other medicine than the common saline mixture, and with perfect success.*

* "I cannot omit this opportunity of entering my protest against the misplaced timidity with respect to the application of leeches to children. It is said young children cannot bear active or repeated depletion, and that, if submitted to such treatment, they sink under it. This may apply to a child eight days or eight weeks of age, but certainly not to a child of eight months or upwards: after this period they bear depletion well, and possess powers of recovery from an extremity of disease far greater than those of the adult: in the latter there are, in many diseases, symptoms which will induce an experienced Practitioner to say there is no chance of recovery, but will he say so of children? I will venture to assert he will not: and I am sure every mother who has reared a family will bear testimony to the extraordinary powers of recovery which children possess. It is also said that the repeated application of leeches reduces the powers of the system, and renders it irritable, thereby becoming a source of irritation to the existing disease. The soothing plan is at present the favourite with many Practitioners: it has not been my good fortune to witness any good effects from this plan in many cases in which I have seen it recommended: the ill effects arising from it have frequently presented themselves to my notice in the form of chronic structural disease, which admitted of no relief. Within the last six years I have seen upwards of ten thousand cases of diseased children; and, during that time, prescribing, as I have done, for thirty, forty, or fifty children of a morning, I have so constantly been in the habit of seeing neglected cases of inflammation of the lungs or the brain, or of fever accompanied by these, that it is my firm belief more children have died from the neglect of leeching than ever adults have died from famine or the sword."

"Where abdominal irritation appears to be the cause, unattended by any symptoms of diseases in the head, we may expect one or other of the following symptoms: either a considerable derangement of the abdominal secretions, or an extremely painful state of the belly, with violent fits of crying and drawing of the legs towards the abdomen, and sometimes the passing of a considerable quantity of wind *per* anum, followed by immediate relief. The secretions of the liver and mucous membrane of the intestines being deranged, the plan I have found most successful is a moderate dose of hyd. submur. and pulv. rhei one morning, and ol. ricini the next, persevered in for some time, giving also twice a day sodæ carb., pulv. rhei, and infus. calumbæ. When pain in the belly exists, it is usually relieved by the warm-bath and a combination of magnes. carb., pulv. rhei, and aq. menthæ. The diet of a child, under these circumstances, is of considerable importance; the breast is by far the best mode of nourishment, and to it the child should be confined, if practicable. If the gums be full, they ought, by all means, to be lanced. The combination of abdominal and cerebral affection is, perhaps, most frequently the case in this disease: when it is so, we should not suppose that mere attention to the abdominal functions will remove the complaint—it will not do so. I recollect, in a case of this description, a friend of mine, who had frequently differed with me in opinion as to the propriety of repeatedly bleeding children, cautioned me against the application of leeches and blisters: it was considered to be a case beyond recovery, there being, to all appearance, effusion in the ventricles. The child was about a year and a half old; and although much emaciated, I applied two leeches to the temple, and rubbed the ung. lyttæ behind the ears: the symptoms were somewhat relieved. The leeches were repeated a second and a third time. The child perfectly recovered; and on being shown to the gentlemen alluded to, he was much surprised. In the course of the disease, the lungs sometimes become the seat of inflammation, requiring the application of leeches to the chest." 125.

Six cases are related by Mr. Cox, in illustration of these precepts; but for these we must refer to the original paper in the Repository.

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12. *Tobacco in Dysentery.** While exhibiting tobacco in tetanus and epilepsy, Dr O'Beirne observed that, this agent produced all the effects of copious blood-letting, which effects disappeared in a day or two, leaving the patient as strong as before. He also had seen tobacco, on many occasions, relieve pain and remove constipation. These qualities recommended the remedy, in his mind, for the cure of dysentery. Cases are, therefore, related to illustrate its effects. We shall only give the particulars of one case as a sample.

* On the Use and Advantages of Tobacco in the Treatment of Dysentery. By James O'Beirne, M.D. Surgeon-extraordinary to the King, &c. Dublin Institution, Vol. iv. p. 386, *et seq.*

Case. Catharine Finlay, ætat. 21, residing in a low swampy situation, was attacked on the 8th September, 1823, with rigors, nausea, griping pains in the bowels, and frequent desire to go to stool, at which times she passed little else than florid blood and mucus. These symptoms continued for three days, without any medicine being taken. 12th. Her mother gave her a dose of castor oil and tincture of senna, which produced a slight feculent discharge, followed by an increase of abdominal pains and urgency to stool. 13th. Our author saw the patient. Her countenance was pale and sunk—tongue white and furred—thirst considerable—skin warm—pain about the umbilicus—tormina—a stool every ten minutes—discharge solely blood and mucus—pulse 100, small and weak.

"An enema, consisting of ten grains of Virginian leaf Tobacco, infused for twenty minutes in six ounces of boiling water, was thrown up, with some pain and difficulty, by a syringe, and as quickly returned without producing any effect. At 4 o'clock P.M. she was directed to take an ounce of oleum ricini, and, in half an hour after, to foment the abdomen with an infusion made by pouring two quarts of boiling water on two ounces of Virginian leaf Tobacco, and allowing it to stand for twenty minutes before use. Directions were given to continue the stuping until giddiness, nausea, and weakness came on, and then to omit it. Nine o'clock P.M. she informed me that the fomentation greatly relieved the tormina and tenesmus; that about half-past 8 o'clock she became very weak; a cold perspiration broke out; she felt her head giddy, and her stomach disposed to turn: that immediately after these symptoms, and just before my arrival, her bowels gave way. On inspection, the discharge was copious, feculent, and mixed with some blood and mucus. Great relief followed; the pulse became soft, full, and 90; the tormina and tenesmus much less urgent; the countenance lost gradually its pale and contracted character; she soon fell into a profound sleep." 389.

From this time she had a rapid convalescence and recovery. Seven cases are related—all evincing the power of the remedy over the disease. The following remarks we shall give in the author's own words.

"On reviewing the foregoing Cases, certain of the effects of Tobacco in Dysentery cannot have failed to fix attention—its power of controlling the undue action of the heart and arteries, and of altering the character of the pulse; the arrest it, as it were, placed on the flow of blood, and on the secretion of mucus from the tract of the digestive tube—the certainty with which it induced that degree of debility necessary to overcome spasm, and favour the unlocking of the bowels—the unerring relief it gave to those obstinate and distressing symptoms, the tormina and tenesmus—the removal of that apparent, not real, debility, which so strongly marks enitric inflammation, and of which paleness of the countenance forms so striking a feature—its rapidly restoring the skin, stomach, and kidneys, to their healthy functions—lastly, its procuring sound sleep, the want of which is so constant a symptom in this disease, and which Rouppe, Pringle, and others, could not induce by opium

and the strongest narcotics—these are prominent features of its full influence, and must be recognised in the progress of the Cases just detailed." 402.

Our author confines the administration of the remedy to the form of fomentation alone. He observed, that when the full influence of tobacco is obtained, the abdominal muscles and the muscular coat of the intestines lose much of their expulsive power. This induced him to premise the use of a mild purgative, so as to allow sufficient time for its passage through the stomach, before tobacco was employed, or its effects on that organ exerted. The changes effected by tobacco, according to our author's belief, are, first, a suppression of the inflamed state of the mucous membrane of the intestines—and secondly, a removal of that spasmodic action of their muscular coat, which always accompanies such a state, and on which retention of the feculent contents seems to depend.—"Perhaps, therefore, it will be found a good general rule to persevere in the use of purgatives, with the tobacco fomentation, until perfectly natural and feculent discharges be permanently established."

These cases and observations of Dr. O'Beirne are certainlydeserving the attention of the profession.

13. *Hydrophobia.** We have a *hundred* vaunted specifics for preventing hydrophobia—and only *one* for preventing variola.—Yet it will be readily granted that we have more success with vaccination than with all the boasted anti-hydrophobics which have, from time to time, been proclaimed. We fear there is no certain prevention of this dreadful disease but early excision of the parts to which the poison has been applied. But this cannot always be done; as in the following case, for example, recorded by M. Recamier.

Case 1. On the 27th of February, 1823, Charles Mignot, a vine-dresser, was assailed by a wolf, which the courageous young man attempted to seize by the tongue, with the hope of choking him. He paid dearly for his temerity; for he had his arm torn and mashed in a terrible manner.—Besides this, he received several other severe wounds in his contest with the furious animal. The medical man (M. Barrau) who first saw him, could do little more than cleanse and dress the wounds—since cauterization of so many and such deep injuries was impossible. There was also no certainty that the wolf was mad. On the third day, a copious nasal hæmorrhage took place, and this discharge recurred several times afterwards. By low diet, and great care, all went on well till the 1st of April (M. Recamier has strangely enough made it the 1st of March, which is ridiculous as well as incorrect) when the wounds in the arm and hand were completely cicatrized. At this time, a

* Considerations sur la Rage. Dr. Fiévée 8vo. Paris, 1824. D'Hydrophobie. Par le Professeur Recamier.—*Revue Medicale. Aout,* 1824.

severe inflammation occurred in the other hand, though it had not been wounded. This was relieved by leeches and other means. On the night of the 9th April, the patient was seized with cephalalgia of one side, and sense of constriction in the throat. The patient lost his appetite, became morose, fearful of death and had difficulty in swallowing drink, but without any dread of liquids.—Pills of assafœtida, musk, and opium. He had some sleep in the beginning of the night, but got up at five in the morning, and went from the house where he lived to that of his mother, in a state of agitation. M. Barrau this day examined the patient's mouth carefully, and could discover no trace of pustules under the tongue.—The difficulty of swallowing still continued. The wounds not yet healed, but looked well. The patient, who was naturally of a good temper, now appeared irascible, and ill-natured. Venesection—increase of the medicines abovementioned—mercurial frictions—exposure to the open air—and every care taken to amuse his mind. The sense of constriction in the throat being great, leeches were applied to that part. 11th. Passed a restless night. He this day put his feet in warm water, without any reluctance; but immediately complained that he felt as if a bar was put across his chest, and threatened suffocation. He occasionally fell into a slumber this day, waking in great fright. 13th. A remission of all the symptoms. The patient ate a soup much better than he had yet done. He also took a warm bath without difficulty. He assured his physician that the constriction of the throat was entirely gone. The mercurial frictions were discontinued as the patient was now in a state of copious salivation. The wounds, yet open, were dressed with mercurial ointment. In the night he had no sleep, and was restless and uneasy all the next day. 15th. The ptyalism is considerably diminished. The patient took some soup, and also some bread soaked in wine, without difficulty. At nine o'clock, he went into the bath, without hesitation, and there fell asleep. He awoke raving, and imagining himself pursued by wolves. 16th. Had some healthy motions this morning—much prostration of strength—acceleration of pulse. Took some soup, and bread soaked in wine, without difficulty. 17th. Had a bad night, with much incoherence of ideas, amounting to delirium. Vomitings of yellow and green bile to day, and expelled a lumbricoid worm.—Could not swallow water to aid the vomiting; but afterwards took two glasses of wine, without much difficulty. The prostration of strength increasing—delirium—quick pulse. 18th. Vomitings distressing—augmentation of the delirium—cries, swears, thinks he is pursued by dogs and wolves; total incoherence of ideas—spasms of the members. This state continued till the 20th—when death put a period to his sufferings. The body was not examined.

We think it is evident that either the disease in question was not hydrophobia—or, if it was that dreadful malady, it was greatly modified by the man's constitution, or the remedies employed. It will be remarked that there was a signal mitigation of the symptoms, at the period when the mercurial ptyalism was developed—indeed, there were reasonable grounds of hope that recovery would

take place. Had the salivation any share in the mitigation or procrastination of the disease ?

We are, upon the whole, inclined to doubt the existence of real rabies canina in this case, notwithstanding the authority of Recamier to the contrary. Probably the reader will be disposed to entertain similar doubts respecting the hydrophobic nature of the following case, related by M. Fiévée.

Case 2. Madam N———, residing in Paris, aged 46 years, of nervous temperament, sombre and melancholy disposition, was bitten by her own lap-dog in the upper lip, on the 15th June, 1823. The dog bit several other dogs, who all went mad. The dog himself was taken to the "Combat des Animaux," where he also died hydrophobic. The lady, not suspecting, at first, that her dog was mad, took no preventive means ; but, after a few days, she went to the place where her dog had been confined, and learnt, to her horror and amazement, that he was dead of hydrophobia. She went instantly to M. Breschet, who cauterized the wound on her lip, with butter of antimony. M. Fiévée was consulted on the fourth day of the accident, and found the lady in great mental agitation respecting the bite. The symptoms, however, were such as might be expected from fright working on the imagination of a nervous and hypochondriacal female. Presently the pulse rose, the skin increased in temperature, and she complained of a constriction about her throat, and also at the epigastrium. She was constantly spitting—sleep forsook her—the appetite failed. As our author apprehended approaching hydrophobia, he persuaded the patient to retire to the village of Vauvres, under the care of Dr. Joanin, of that place, where she was also visited by Messrs. Voisin and Falret, who have their Lunatic Asylum established there. On the 6th day, she was found to be very feverish, with great agitation, amounting almost to convulsions, constantly spitting, thirst moderate. Till the 9th day, there were no other means used than warm baths to the lower parts of the body, refrigerants to the head, and diluents internally. On the 7th, 8th, and 9th days, the physicians in attendance discovered the pustules, described by the Russian physicians, under the tongue of their patient.—They disappeared on the 9th, and were not cauterized. As the symptoms were now increasing, the therapeutic agents were also increased. In addition to other means, *fifteen grains* of calomel were given every night, with a grain of the extract of belladonna. From the 18th to the 30th day from the accident, the symptoms gradually diminished—but from the 30th to the 40th day, things retrograded, and apprehensions were entertained that hydrophobia was at hand. It is curious that, at this epoch, the dogs bitten by the lady's lap-dog all died at the "Combat des Animaux," where they had been placed for security and observation. The change for the worse, in the lady's symptoms, induced the physicians to exhibit the oxymuriate of mercury, instead of the calomel —to which was added a combination of sulphate of quinine and opium. These medicines were augumentnd daily, till at length

they were given in very large doses. By these means the lady got well, and returned to her friends.

The history of this case is the most confused and unsatisfactory we have ever read. No mention is made of any mercurialization of the system, although the lady was taking mercury in enormous doses, for weeks together! In short, we can hardly believe the patient actually received the hydrophobic poison—or, if she did, it never affected the system. Whether the mercury, in this case, proved prophylactic, we cannot say. The circumstances are such as to afford a presumption that it had this effect. It goes to corroborate the statements made a few years ago, by Mr. Daniel Johnson of Torrington, Devonshire, who asserts that mercury *prevented* hydrophobia in every case where it was taken for a certain time after the bite of rabid animals.

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14. *Compression in Ascites.** Dr. Godelle was led to compression of the abdomen as a means of curing ascites, from observing that it prevented, at least for a time, the re-accumulation of fluid in the cavity of the peritoneum, after the operation of paracentesis. The following is the case brought forward in illustration of this anti-hydropic agent.

Vorgier, a shoemaker, 18 years of age, of feeble constitution, and subject to nasal hæmorrhages, had the natural small-pox, and afterwards the measles, in the beginning of 1823. On the 15th of April, 1824, after a long and fatiguing journey, on a cold and dry day, he found himself unwell, and affected with lancinating pains at the pit of the stomach, and over the abdomen. Diarrhœa succeeded, and afterwards dysury. He neglected himself, and the diarrhœa continued, attended with so much debility, that he was obliged to seek refuge in the HOTEL DIEU, on the 5th of July. At this period he had fever, vague darting pains at the epigastrium, painful tension of the belly, thirst, high-coloured and scanty urine, dry burning skin, small quick pulse, frequent cough, without expectoration. There was obscure fluctuation on percussion of the abdomen.

It was pronounced that the patient had chronic peritonitis, with incipent effusion. Leeches to the epigastrium and hypochondria—nitrous mucilaginous drink—fomentations—pediluvia, &c. The patient had some appetite. These means were varied or reiterated, according to circumstances, for fifteen days. He could not bear digitalis. The effusion increased daily. He left the hospital on the 21st July—but returned on the 3rd of August in a still worse condition. The countenance was altered—cough constant—belly swelled, tense, and painful—urine scanty and red—skin dry—diarrhœa—no appetite. Diuretics and other means were tried, but the malady increased, and the abdominal swelling incommoded the breathing so much that the surgeon was on the point of performing paracentesis, when Dr. Godelle thought he would give compression a trial. A bandage was first applied

* Dr. Godelle. Nouvelle Bibliotheque, Sept. 1824.

but that was always slipping. A broad belt, with lacings like ladies' stays, was next employed, and answered well. Instead of being incommoded by the pressure, the patient breathed easier, and had less pain.* Pressure was made on the 15th, and by the next day, the belly had sensibly diminished. This diminution daily made progress, and by the 20th, or fifth day from its first application, the patient's abdomen was reduced to its natural size, without exhibiting any symptoms of fluctuation. It is proper to state, however, that during this time, digitalis was given in doses of *four grains daily*. "Under the double influence of these agents, the urine flowed in enormous quantities." We leave our readers to determine which of these agents was the *diuretic* on this occasion; for no one will doubt that the prodigious flow of urine was the real and efficient cause of the sudden abdominal diminution.

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15. *Hydrocephalus cured by Mercury.*† This was a boy, seven years of age, who, for some time previous to application, had been listless and languid—sometimes flushed, sometimes pallid, with thirst, dry skin, and irregular bowels. A physician prescribed some opening medicine, containing calomel, which afforded temporary relief. He afterwards began to complain of dull pain in the forehead, vertex, and sinciput, with pyrexia, all which gained upon him daily. On the 7th day of his illness, Drs. Fisher and Munkittreck were called in, and found the little patient complaining of his head, with ferretty eyes, pulse 110, and firm, tongue loaded, bowels very irregular, evacuations alternately greenish, slimy, and mucous.

The bowels having been repeatedly evacuated, our authors were determined to attend to the head. This was shaved—cold washes applied—twenty leeches to the temples—and purgatives persevered in, together with two grains of calomel every three hours. Three days of this plan produced little alteration of the head-ache. A blister was now applied to the nape of the neck—and the leeches reapplied to the temples. Still there was no relief of the symptoms. "The tumefaction of the epigastric and hypochondriac regions, which had existed from the beginning, now rather increased, and much uneasiness was produced on pressure." Twelve leeches were applied to the part. At this period (the 12th day) the boy became comatose, with the eyelids half closed—the pupils insensible to light—paralytic affection of the left arm, thigh, and leg—difficulty of swallowing. In addition to the internal exhibition of calomel, frictions of mercurial ointment were directed to the hypochondriac region, night and morning—cap blister to the head—sinapisms to the feet. In the state

* We can easily conceive that pain might be mitigated by pressure in this case; but we certainly have much doubt that dyspnœa would be lessened by the application of a compressing force to the abdomen of a dropsical patient.—*Rev.*

† Dr. Henry Fisher, Ed. Journal, Jan. 1825.

above described, the little patient lay till the 25th day, during which time the urine and fæces were discharged involuntarily, his pulse ranging from 60 to 66 strokes in the minute—his right hand constantly on the side of his head—left paralytic. On the day above mentioned, there appeared symptoms of constitutional effects of the mercury, and the pulse rose from 80 to 86—the pupil became slightly sensible to light—stools tinged with bile, and ceasing to exhibit the spinagy appearance. "The alteration really appeared miraculous." "From this period, he recovered rapidly, and in a month was quite well."

We think the above case is entitled to the appellation of hydrocephalus—at least, we have found the pathological characters of the disease in the examination of all those who died with the foregoing symptoms. At the same time, we do not imagine that effusion to any extent had taken place. The case teaches us that we should not too readily despair in the treatment of hydrocephalic children, but persevere till the last. This case also furnishes very strong proof that the green or spinagy stools are not simply the product of the calomel, but a very constant symptom of the hydrocephalic condition of brain. Here the stools changed *during the exhibition of the calomel*, and all the symptoms partook in the contemporary amelioration.

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16. *Boiling Bath in Chronic Rheumatism.* The following *anceps remedium* we should hardly say was—melius quam nullum. It is recorded in the *Journal Universel des Sciences Med.* for November 1824.

A young woman had experienced rheumatic pains in her limbs, for six months; the joints, hands, and feet being swollen, and little capable of motion. Leeches, cataplasms, tepid baths, and anodyne embrocations had given but temporary relief. She was advised by a Charlatan to remain in a hot bath for twelve hours—the temperature of which he gradually increased *till it was very near the boiling point!* After six hours sojourn in this torrid zone, the patient lost sensibility—or, at least, recollection, and in the course of another hour was found senseless, her head reclining on a board covering the bath. She was taken out of the water, her face being enormously swollen and blackened—the eye-lids tumefied—the eyes distorted—the skin of a dark red colour—feeling and recollection lost—taciturn delirium—grinding of the teeth—foaming at the mouth—convulsions of the limbs—laborious respiration—distention of the abdomen—hard and irregular pulse.

She was bled from the arm to 28 ounces. She soon recovered recollection and speech—the convulsions ceased, and she only complained of pain at the epigastrium, and thirst. A large emollient cataplasm was applied to the pit of the stomach, and ices were given. She passed a restless night. On the following day, the pain at the epigastrium was very severe, and 40 leeches were applied, which gave much relief. On the third day, the patient

complained of pain about the umbilicus, and twenty leeches were applied there, with instant relief. In eight days she was quite recovered. Six weeks afterwards the whole of the epidermis peeled off. Eleven months have now elapsed, and the patient has had no return of the rheumatism.

We think this process bore a tolerable good resemblance to a dip in Medea's Cauldron. The trial was a hazardous one—but appears, in this instance, to have succeeded in curing the original disease.

V.

Midwifery.

1. *Puerperal Irritability.* *Mr. Waller, the author of this paper, appears to have some obscure views of the principles we laid down in the second number of the present series of our Journal, pp. 415, et. seq.

He observes "every one who has been much engaged in midwifery practice, must have observed that there are two species of disease equally dangerous in their nature, to which the puerperal female is obnoxious; in the one, the abdomen is affected, in the other, the head, (and this totally distinct from the puerperal mania.) This affection appears most frequently to take place after a copious loss of blood," though not invariably—and of the latter fact an instance is given. Mr. Waller concludes with the following observation. "My chief reason for publishing this case is to excite the attention of my professional brethren to a form of disease, which they must have every now and then met with, and which may be termed puerperal irritability, which is not noticed by authors, nor, as far as I am aware of, by our obstetric teachers, and which, consequently, is an exceedingly puzzling complaint to a young practitioner." Whether this affection be mentioned by authors, Mr. Waller and our readers will best judge by turning to the article in our second number, to which we have referred them. In point of fact, the cases here adduced are apt confirmations of the principles we have there laid down. We extract the last of these cases, because it is full of interest in itself, and because it is the more authentic from having been witnessed by Dr. Blundell.

"The subject of this case was a lady, ætatis thirty-seven, delivered of her first child after a short and natural labour, on the 25th of last month (October). The placenta was retained, and, a very considerable hæmorrhage coming on, I judged it right to remove it, and in so doing found it to be adherent throughout the greater part of its extent. A very alarming state of syncope supervened previous to its removal, and continued for several hours afterwards, although there was but little after-hæmorrhage.

* On Puerperal Irritability. By C. Waller, Esq. Med. and Phys. Journal, for February 1825, p. 116.

She complained of intense pain at the præcordia, which was relieved by administering a dose of laudanum in some warm gruel, to which a little essence of ginger had been added. She at length rallied, and appeared to be going on favourably till the 29th; with the exception, however, of weight and pain in the head, to which she had been subject for some time previous to her confinement. Her pulse was uniformly accelerated, seldom less than 100 in the minute.

"October 29th.—In consequence of being a little irritated, she has severe pain in the head, with throbbing of the arteries; her pulse is 100, and beats with considerable force. Mitatur sanguis e brachio ad uncias viij. vel x. The blood presented an exceedingly buffy and cupped appearance; the coagulum was so firm that I could with difficulty pass my finger through it. This apparently trifling quantity of blood relieved the head greatly, but left her in such a state of syncope, that for many hours she could scarcely move hand or foot. Hyoscyamus was given to the extent of fifteen grains of the extract every four hours, with an occasional laxative. She slept much, but never waked refreshed, and there was uniformly a sensation of heaviness over the eyebrows.

"On the 2d of November (the ninth day after parturition, reckoning that of delivery as the first,) in consequence of a trifling domestic occurrence, she was thrown into a state of excessive irritability, and the symptoms of cerebral disorder were much increased: she complained greatly of a feeling of constriction within the head, as if the cranium was too small for the brain, and it was on that account compressed. The senses of sight, hearing, smell, and taste, were painfully acute: the pulse 100. Eight leeches were applied to the temples, and a laxative administered. In the evening, finding her no better, I requested a consultation, and Dr. Blundell was sent for, when it was agreed to apply six more leeches to the temple, to give her the digitalis in operative quantities; to have the hair removed, and keep the head constantly wet and cold with a lotion composed of equal parts of spiritus eth. sulph. and water.

"November 3d (tenth day.) Somewhat, though not very materially, relieved; pulse still at 100. Repetatur remedia.

"Nov. 4th (eleventh day.) The feeling of oppression still continuing, eight leeches were again applied to the temple. Continuatur celera.

"Nov. 5th (twelfth day.) Was called to her about two o'clock this morning, and found the symptoms very materially aggravated: she had a weak, small pulse of 124; a whitish, but somewhat moist, tongue; a very pallid countenance; subsultus of the muscles of the lower extremity, and a quivering also of those of the lower lip; with that peculiar, faint, earthy smell of the breath I have more than once noticed in moribund patients. It was now very evident that, although action was increasing, power was rapidly on the decline. I again requested the assistance of Dr. Blundell, and in consultation it was agreed to put her fully under the influence of opium, and to continue the evaporating lotion freely. This medicine was ordered in doses of three grains

of the extract every hour, till sleep was procured. She began about six o'clock in the morning, and at one in the afternoon I gave her the sixth dose, making eighteen grains of ext. opii in seven hours. The pulse was now (one o'clock,) down to ninety-two, full, and round, very different to the irritable pulse of the morning, and she appeared in a very tranquil state.—Another three-grain dose of the opium was given her at five o'clock, and a draught, composed of liq. am. acet. et mist. camph. every four hours. She slept all the night, and nearly the whole of the following day; her breathing was stertorous during the night, but she could be very readily roused. She wandered a little, but not much, during her sleep, and awoke very much refreshed.

"Nov. 6th—Seemed considerably relieved this morning.—Repetatur haustus liq. am. acet.; capiat pil. opii hora somni. This pill was twice repeated, as she seemed rather restless, which, at length, procured her some refreshing sleep.

"Nov. 7th—Still on the mend, although she has had some slightly hysterical paroxysms, which distressed her greatly for the time. A little cascarilla infusion was now added to her draught.—Continuatur pil. opii nocte.

"Nov. 8th—Convalescent: took two pills last night, which procured her sleep. From this time she has had no relapse, and is gradually, though slowly, regaining her strength. The secretion of milk was never entirely checked, nor was the lochial discharge.

"The foregoing case shows, in a striking manner, the utility of putting the system fully under the influence of opium, in this state of excessive irritability. Antiphlogistic medicines were had recourse to, with little or no benefit; but, so soon as this medicine began fairly to act, we find the pulse running down from 124 to 92: indeed, I think it very evident that we must have lost our patient but for this decided plan of treatment, as every thing seemed to indicate approaching dissolution." 121.

We shall leave this case after having pointed out several circumstances which appear to be particularly worthy of observation.

1. There are urgent symptoms of affection of the head after profuse hæmorrhage.

2. These symptoms were relieved by abstracting eight or ten ounces of blood, by which long-continued syncope was induced.

3. They returned, as they had begun, after mental irritation.

4. They were finally subdued by opium.

Now we would ask, if hæmorrhage was the *cause* of this affection, was blood-letting the proper remedy?—is it not plain that the *head* was *relieved* only by the substitution and during the continuance of the *syncope?* does not the *effect* of the *opium* on the pulse and symptoms teach us not only what was the nature of the case, but what is the proper remedy in such cases? and we would wish to be informed what *good* could be anticipated from the digitalis.

2. *Ascites and Pregnancy.* Since we last noticed this subject in our third number, the following cases have presented themselves to our perusal in a foreign journal, from the practice of Dr. Olivier, the able author of a work on spinal diseases.

Case 1. Anne Chartier, 31 years of age, of robust constitution, was married in the year 1816. In April of the succeeding year, she found herself pregnant, and at the same time an ascites appeared, and became daily more distressing, till, in the sixth month of utero-gestation, the abdomen was of enormous size, the lower extremities being also greatly œdematous. She was forced to keep her bed during the three succeeding months, and was then safely delivered of a living, though a weakly child. One month after delivery she was tapped, and thirteen pints of clear water were drawn off. Both ascites and anasarca were cured by this operation, and the woman resumed her usual avocations. In the following December she again became pregnant, and again the ascites marched pari passu with the pregnancy. The lower extremities became enormously infiltrated, and the abdomen so distended as to threaten suffocation. She entered the Hotel Dieu of Angers on the 13th of July 1818. She could not lie down in bed, and to her other distressing symptoms were joined severe headache, and frequent tendencies to lypothimia. During the next seven days the symptoms continued the same, in spite of remedies directed against the dropsy. On the 21st of July the orthopnœa was so pressing that paracentesis was imperiously demanded. It was performed by merely plunging in a lancet near the umbilicus. The water spouted out to the distance of five feet. It was limpid as distilled water. Sixteen pints were drawn off, and then the uterus could be distinguished. The patient felt greatly relieved. The fluid continued to ooze out of the wound for twelve days, and then stopped. The ascites again made progress, and on the 20th of August it was necessary to perform the operation as before, when eight pints of water were evacuated, and followed by the same relief. On the 22d, labour pains were felt, and in three hours she was delivered of a living child. In fifteen days from this time the patient was discharged from the hospital, perfectly cured.

Case 2. A woman, 36 years of age, consulted Dr. Olivier respecting a dropsy of four years standing, which came on after an accouchement. A few months after consultation, the ascites had made such progress that paracentesis was performed—the patient relieved, and she went to her usual avocations. After this she became pregnant, and also ascitic, the dropsy forming an abdominal tumour of great prominence in the umbilical region, similar to the head of an adult. In this place, the patient performed paracentesis herself several times in the course of the pregnancy, by means of a writing pen, and she went on to her full time, the punctures healing kindly.—*Archives Generales, Oct.* 1824.

3. *Preternatural Presentation.** Mr. Brown has published a case of preternatural presentation, on which Mr. Thompson has made some severe strictures. We shall first state the particulars of Mr. Brown's case.

Mrs. Jackson, ætat. 30, of small stature, was taken with labour pains of her second child, at nine in the evening, (30th September,) and at seven next morning Mr. Brown was in attendance.—The pains being trifling he left her, but returned at four P. M. and, on examination, found the os uteri fully dilated, the pains urgent—but these soon subsided. At five o'clock, the membranes being distended, Mr. B. ruptured them, and "*felt what he considered to be the right foot of the fœtus, with several inches of the funis umbilicalis accompanying it, on the pubic side of the superior outlet of the pelvis.*" No uterine action followed. At ten minutes before seven, he gave his patient an infusion of the ergot of rye. She began to complain of slight uneasiness in the belly and back—and in a short time the pain was not only urgent but incessant. Mr. Brown informs us that, after rupturing the membranes and making the examination, he endeavoured to bring down the foot, but could only get it just without the os externum. On this foot he used a considerable extractive force, but without producing farther descent. The other foot was, with some difficulty, brought down, and still more extraction made, but in vain. The labour pains were now urgent, and Mr. Brown discovered that what he had taken for the breech of the child was, in reality, its head, which was brought low into the vagina. Being here jammed, and all pulsation in the cord having ceased, our author sent for his instruments, and, in consultation with Dr. St. Clare, performed cephalotomy, after which a very moderate degree of force on the feet delivered the fœtus. The mother recovered perfectly.

Such are the facts of the case, and we think they did not call for the severe animadversion of Mr. Thompson, who says it is "surprising to find a case so singularly, not to say *unprofessionally* treated." Hard words these, Mr. Thompson—and not, we think, in the true spirit of Christian charity, or professional amenity. Mr. Brown, he avers, appears to have erred in three points.

"1st, In not, after rupturing the membranes, ascertaining the exact nature of the presentation.

"2dly, In using the ergot without such knowledge; and,

"3dly, In not resorting to the right means, which the above knowledge would have pointed out, at the time when practicable.

"It has been long laid down as a rule, from which we ought not to swerve, to endeavour to ascertain, on rupturing the membranes, the true nature of the presentation. This it is necessary to do, that we may be prepared, before the water has drained off, to employ any plan which its presence is likely to facilitate. To come at this knowledge, it may, perhaps, be requisite to introduce the

* Mr. Brown. Medical Repository, January 1825. Mr. Thompson. Same Journal for February 1825.

hand within the outlet, rather than leave the mind unsatisfied of the actual state of things. *It does not appear, in the report of the case, that this was done, but that the membranes were only ruptured, at five P. M. to hasten the contraction of the uterus: this was the ostensible reason, as we do not find that any correct idea was gained respecting the descending part, which might or might not be a foot with the cord.* That the knowledge was not correct, there is good reason to suppose; for we find that after considerable force, which had caused a further descent, the presentation above the part grasped by the hand was even yet judged to be the breech. When the true nature of the case was discovered, it was too late to remedy the error. Thus, then, by not being certain of the state of things early in the labour, what might have been comparatively simple, was made complex, and, of course, the danger proportionally increased." 110.

Upon the above passage, we take the liberty of making a few remarks. From the latter part of the passage in italics, Mr. Thompson seems to aver that Mr. Brown made no examination after rupturing the membranes; whereas the latter distinctly states that he did examine, and found a foot presenting. Now as, *in most cases*, where a foot or feet present, we may expect that legs, thighs, and a breech will follow—and as Mr. Brown *did feel* what he thought was the breech of the child, he (Mr. B.) cannot fairly be accused of more than this mistake, which he candidly acknowledges, and which Mr. Thompson or any other practitioner might have made under similar circumstances. How very harsh then, and hypercritical is it, to condemn the candid narrative of such a mistake under the personal aspersion of *unprofessional treatment.* It is no wonder that unsuccessful cases and errors of judgment are carefully excluded from the public sight, when such comments as those of Mr. Thompson are to be the reward of candour! It is in this way that hypercriticism wounds the very vitals of medical science, by preventing the exposure of those rocks on which its votaries are daily wrecked! Delinquency in morals or medical ethics can alone merit the severe term of "unprofessional:"—to *errors in judgment*, it is unpardonable to apply such expressions.

That Mr. Brown may have been wrong in administering the ergot of rye, at the time he did, and without being perfectly certain of the position of the fœtus, we will not argue. We shall give the conclusion of Mr. Thompson's critique, as it involves practical matters of importance.

"It is apparent that the time was lost, when the case might have been made a simple one. There were two modes by which this might have been done. One, by risking the life of the child; the other, by which the child's life might have probably been saved. If at four o'clock the membranes had been ruptured, and the foot pressed up by the side of the head against the face, the case might there have become one of presentation of the cord merely. This method I adopted with success, in July 1817, in

the case of a tailor's wife, in which the foot presented with the head, but without the cord: it was reduced with comparative ease. Dr. Ramsbotham, (as Mr. Brown might have informed himself, if he had desired, at page 300 of that gentleman's excellent publication,) describes a similar case, in which success followed the method pursued. But if the child had been turned either at four or at five P. M. its life would not have perished in all probability, and the woman, by doing so, placed in little or no jeopardy. At four the pains were active, and the delivery might have been effected immediately. At five, the feet might have been brought down into the vagina, and left there if thought necessary. After this time it was impossible to effect it with safety, as the waters were all drained off by walking across the room and the pains together. With the rest of the case I have nothing to do; it was effected with dexterity and despatch. I hope Mr. Brown will take what has been said in good part, because he has drawn animadversion upon himself; *for had he considered a moment, he would not have let either the observations or the case meet the public eye.*" 111.

We have already expressed our opinion on the principle conveyed in the last three lines of the above quotation. It is acknowledged, on all sides, that, in medical practice, the wisest and the most experienced are daily committing errors—yet here is laid down the Machiavelian precept—*never to let our errors meet the public eye!*

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4. *Puerperal Fever.** From some interesting documents in the third number of our respected northern cotemporary, it appears that puerperal fever has been committing dreadful ravages in the Lying-in Institution of Vienna, during the autumn of 1819. There were 56 dissections—an important basis for drawing pathological conclusions. The patients were mostly between twenty and thirty years of age. Most of them were of full habit of body, and only three emaciated.

"In all were observed many livid blotches over the whole body, and rapid putrefaction soon after death; in most of them immediately, so that in a few hours the bodies could scarcely be opened.

"In all there was a bloody discharge from the mouth and nostrils.

"In all the belly was more or less greatly distended, except in two, who had been delivered a considerable time before death.

"The parts of generation were every where more or less swollen, discoloured, reddish, and foul; four were syphilitic.

"Marks of blood-letting appeared in 13; of leeches on the abdomen in 7; of blisters alone in 17; and of both cupping and blisters in 12.

"In the head, the organs were always turgid with blood; the ventricles generally contained more than the usual quantity of serum; in other respects there was nothing worthy of notice in reference to this disease.

* Baron Von Matoschex. Ed. Journal, No. 3, New Series.

"In the trachea there was generally found a sanguineous fluid, and its internal surface was reddened.

"The lungs were always in the greatest state of expansion, turgid with blood, frequently adhering or united by effused lymph to the pleura, which was generally, but not in all, slightly red.

"In the cavity of the thorax and pericardium, there was invariably more than the usual quantity of bloody serum; the pericardium in no case morbidly changed, nor the heart externally, but its substance, without exception, more flaccid and tender than in the healthy state. Its internal surface, particularly the valves, chiefly of the right side, of a deep red, often of a black colour; the mass of blood generally fluid.

"In the abdomen there were only two cases in which there was no unnatural fluid, *i. e.* in those cases which had been delivered a considerable time before death. In all the rest there was found from one to two quarts of turbid, very fetid fluid, mixed with portions of coagulated lymph, and sometimes purulent matter; the latter appearance was observed in those cases where powerful antiphlogistic means had been employed, and which had survived longer after delivery.

"The peritoneum, omentum, and mesentery, exhibited, in five cases only, no appearance of redness; in the rest it was always somewhat more or less red, particularly towards the pelvis; and they were often agglutinated with the adjacent parts.

"With the exception of two cases, the stomach and intestines were always much distended with air, and their external surface more or less red. *Lumbrici* frequently appeared in great numbers, not only in the small, but also in the large intestines, in the stomach, rectum; and, in one case, in the nostrils.

"The liver and spleen were always similarly affected; they were much more pale, flabby, and tender than in their healthy state; easily broken down with the finger, similar to the degeneration of the uterus, and filled with somewhat fluid blood. These appearances were seen even in those two cases where the abdomen was not distended, nor contained fluid, and in which the intestines were healthy. The gall-bladder was always much filled with dark bile. The pancreas always healthy.

"The kidneys, in most of the cases, were flabby and tender. The ureters always somewhat enlarged, and red. The urinary bladder always contracted.

"The internal parts of generation were every where covered with yellow coagulated lymph, except in the two cases, in which no fluid was found in the abdomen; and in those cases in which strong antiphlogistic means were used, there was frequently a thick yellow purulent fluid often externally on the neck of the womb. The ovaria and fallopian tubes were always more or less swollen, red, and tender.

"The uterus, in all cases little contracted, was more or less red externally, even in those where the delivery had taken place long before, and the abdomen was not otherwise in an unhealthy condition. The substance or body of the uterus was always flabby, tender, easily broken down by the finger; in two cases, full of small holes or cavities filled with stinking blood. In two cases,

the uterus, on account of the tenderness of its substance, had burst, during delivery, at its neck; in the one case, the rupture was four inches in length; and, in the other, one inch and a half. The cavity of the uterus was found filled with fetid air several times, particularly in the syphilitic women. Its internal surface appeared generally covered with offensive cineritious ichor or mucus, only seldom with offensive viscid blood. Beneath this, it was always red, discoloured, often as if slightly eroded or ulcerated, the internal membrane very much eroded, and destroyed. Thus, in a woman of eighteen years of age, who had been delivered three weeks, in whom the abdomen was not distended, nor contained fluid, and there was nothing diseased in the abdominal cavity, except the liver and spleen being flabby and tender, the uterus was entirely ulcerated on its internal surface, like the internal surface of one of the large intestines, when covered with ulcerations. She died on the twenty-ninth day. On the fundus of the uterus, there generally remained particles of the placenta and *membrana decidua*, in the form of putrid shreds. The colour of the cervix of the uterus was constantly darker than the rest; and it always was darkest, and penetrated into its substance, at the mouth of the womb, which was likewise much dilated, and often as if destroyed with loss of substance, often cracked, as if rent. The vagina was generally preternaturally red.

"Such were the facts carefully abstracted from the whole fifty-six dissections." 86.

From these, and other phenomena about to be mentioned, we think it is evident that this puerperal epidemic of Vienna differed considerably in its pathological characters, from the puerperal fever which we are accustomed to see in this country. Whether these modifications depended on the nature of the disease, the constitutions of the patients, the climate of the place, or the modes of treatment, we cannot pretend to determine.

A committee being appointed to investigate the nature of this dreadful scourge, the work was set about with more zeal than success. According to Professor Boër, the accession of fever was always preceded by some deviation from health—particularly in the uterine system. The lochia disappeared either immediately, or in a few hours—the mammæ became empty, loose, and flabby.

"But the most alarming circumstance was, that while the disease was yet, in all appearances, a recent acute inflammation, Dr. Boër, on examination with the finger, already discovered, in the mouth of the uterus, marks of gangrenous disorganization, which were rendered evident even to the by-standers, by the putrid smell of the finger." 87.

Such a phenomenon as the above we do not recollect to have noted in any English author on puerperal fever.

The last stage of the disease presented all the symptoms of effusion in the chest and abdomen—which symptoms were amply confirmed by dissection. All the viscera were found in a soft and putrid condition, while the blood was in a dissolved state. The internal surface of the uterus was destroyed by gangrene—particularly about the os uteri. This was the case in the whole 56

dissections. The treatment was completely unsuccessful, as the following extract will show :—

"The treatment of the disease, according to the report of Professor Boër and his assistant, confirmed by Dr. Raimann, had hitherto been chiefly antiphlogistic. They employed in most cases, immediately on the commencement of the disease, repeated venesection, the application of leeches, emollient cataplasms, emollient clysters; at a later period, blisters, with the corresponding internal remedies; in some cases calomel and other celebrated remedies; and in some, where gastric affections at first predominated, emetics and other appropriate remedies were given. On the commencement of debility, they had recourse to diffusible stimulants, but always with the same unfortunate result; the only difference being, that some were carried off by the violence of the disease very quickly, even in a few days, and one in six hours, others more slowly. The chief physicians, Schiffner, Festi, Belletzky, and Director Raimann, were not less unfortunate in the treatment of those pregnant women whom they took out of the Institution into their respective divisions of the Hospital. Notwithstanding the meritorious and scientific exertions of these able practitioners, all of their patients died." 88.

The causes of the disease could not be ascertained by the committee. No contagious property could be traced by Professor Boër. The committee, however, entertained doubts on this subject.

Upon the whole, these documents, triste and authentic as they are, throw little or no light on the nature or treatment of puerperal fever—nor do they hold out any increase of hope in medicine, when one of those dreadful epidemic scourges has once commenced its destructive career.

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5. *Supposed Scirrhus Uteri.* In the Revue Medicale for March, there is a case which is said to be scirrhus of the uterus successfully treated by iodine, internally administered. We mention the case, because we have seen many instances where pain and morbid sensibility had taken such possession of the cervix and os uteri, as to lead to the belief that the parts were organically affected, but where, in fact, the case was much otherwise. These complaints are not described by obstetric authors, in any clear manner. They might be called cases of IRRITABLE UTERUS, or perhaps HYSTERALGIA; and are well worthy of a monograph from some experienced accoucheur. We understand, indeed, that Dr. Gooch will favour the profession with some observations on this subject. We had the advantage lately of his advice, in consultation, on two cases of this kind, one of which is recovered, and the other is under treatment.

Dr. Klaproth's patient was only 23 or 24 years of age, and after two miscarriages and obstructed menstruation, became affected with leucorrhœa, pain in the groins, and sense of heat in the vagina. On examination, he discovered *an induration at the os uteri, accompanied with sensibility and heat.* This is all the evidence he gives of scirrhous uterus. Eight drops of the tincture of iodine were given thrice a day, and an ointment, containing digitalis, belladonna, and hyoscyamus, externally applied. The patient soon menstruated, and, in process of time, all the symptoms of scirrhus,

if such they could be called, vanished. We consider the above as a case of IRRITABLE UTERUS.

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5. *Tendency to Plethora in the pregnant State.** In the second number of this series (Sept. 1824, p. 355, *et seq.*) we drew the attention of the profession to a paper entitled "*Observations on a Species of Premature Labour, to which Pregnant Women are not unfrequently liable,*" by an experienced physician. The paper of Dr. Musgrave, now before us, bears on this important point, although it was drawn up before our journal reached Antigua. We beg our readers first to recur to our analysis of the paper alluded to, and then they will profit more by Dr. Musgrave's case, which we shall now endeavour to abbreviate.

Case. Mrs. R. M. now 27 years of age, of a robust form, was married in October, 1814, and twice miscarried at an early period afterwards. On the 7th of January, 1817, she was taken in labour, at the full period, and was delivered by forceps in the midst of convulsions. By bleeding and other proper means, she recovered, and the child lived.

In 1819, the lady again proved pregnant, and was safely delivered on the 21st of March, 1819, having been annoyed in the latter months of utero-gestation, by a sense of pain and fulness in the head, for which she was twice blooded, and the bowels carefully attended to. Shortly after the expulsion of the placenta, this time, she suffered acutely from hysteralgia, till relieved by an opiate. To this succeeded a discharge, nearly amounting to hæmorrhage, requiring cold applications, &c. Ten or twelve days after delivery, she insisted on having a tooth extracted, a few days after which (having been exposed to cold) she complained of pain extending from the face to that side (*right*) of the head. Liniments —anodynes—purgatives—antimonials, appeared to give relief for a time. But, on the second night from this time, she was found with symptoms of slight apoplexy, and with complete hemiplegia of the *right* side. Bleeding, blistering, and purgation dissipated the cerebral symptoms, but the paralysis was long in subsiding, and the right arm, to this day, is partially paralytic.

Again the lady became pregnant, and between the second and third month, while sitting at supper, she was attacked with severe pain in the *right* side of the head, sickness at stomach, and confusion of ideas. These were quickly relieved by evacuations, and her usual health was restored. It was at this time, that the forgoing history of her case was drawn up by Dr. Musgrave, and transmitted to several eminent practitioners in Great Britain, together with the following queries.

"1. Was or was not the hemiplegic attack connected with the puerperal state?

"2. Could the extraction of a tooth at that particular time have had any and what influence in producing the attack?

"3. Was the plan of treatment adopted by Dr. Musgrave defective in any and in what points?

* Dr. A. Musgrave, of Antigua. Med. Repos. Feb. 1825.

"4. What regimen and what remedies will, at this period, be most likely to carry Mrs. M. safely through her pregnancy, as well as lead to restore the lost power over her hand and wrist?" 93.

We can only introduce the opinions of Drs. Hamilton of Edinburgh, and Davis of London, on the above case—the other opinions, indeed, agreeing, on all essential points, with those detailed by the gentlemen in question.

No. 1. *Dr. Hamilton's opinion.*

"In reply to the queries stated by Dr. Musgrave, I take the liberty to offer the following as my unbiassed sentiments:—

"I. The hemiplegic attack appears to me to have been connected with the puerperal state, both because that state predisposes to affections of that description, and because Mrs. M. had already had a decided modification of the same cause which produces hemiplegia.

"II. The mere extraction of the tooth could not have been the cause of the hemiplegia; for had it been injurious, it should have produced convulsions; but the subsequent inflammation of the gum, with its extension to the neighbouring parts, from its effect upon the nerves which proceed from the base of the skull, appear to me to have been the probable cause of the hemiplegia.

"III. The plan of treatment adopted by Dr. Musgrave seems to me to have been, in every respect, most active and judicious; and I have no hesitation in affirming, that but for the decided bleeding on the 7th January, 1817, and the prompt extraction of the infant, Mrs. M. could not have survived the delivery. As to the attack of hemiplegia, it could not have been foreseen, and I scarcely believe that it could have been prevented after the incoherence of ideas was discovered. From the account of the case, the state of the pulse did not indicate blood-letting; and I am almost certain that the subtraction of blood at that time could not have stopped the progress of the disease.

"IV. The means which appear to me most likely to conduct Mrs. M. safely through her present pregnancy, to prevent the recurrence of the alarming symptoms, and to restore the use of her hand and wrist, are the following:—

"First, Her diet should consist entirely of vegetables, with the smallest possible proportion of liquids, and with total abstinence from all fermented liquors of every description.

"Secondly, she should make as little exertion as possible, one great object being to keep the action of the heart and arteries perfectly quiescent. On this account, she should indulge very much in the horizontal posture; and, for the same reason, every circumstance which may tend to excite any sudden or violent emotion of the mind, is to be scrupulously guarded against.

"Thirdly, The bowels are to be opened twice or thrice daily. For this purpose one or two of the laxative pills (A) are to be taken every night at bed-time, and a suitable dose of the sulphate of magnesia, or the sulphate of potass, or the pulv. salin. comp. of the Edinburgh Pharmacopœia, every morning fasting.

"Fourthly, One of the powders (B) dissolved in half an English pint of boiling water, and allowed to cool, is to be taken daily, in divided doses, in the course of the forenoon. This medicine produces no sensible operation, but it has, for several years, seemed to me to have an especial influence in removing topical congestions or thickenings within the cranium."*

"Fifthly, Should any symptoms of interrupted circulation within the head threaten to occur, blood ought not only to be drawn from the arm, but also from a branch of the temporal artery.

"Sixthly, If labour be at all protracted, venesection must be had recourse to.

"* Will Dr. Hamilton forgive me for acknowledging that I never for an instant, after having read it, contemplated availing myself of his prescription (B) and that I have ventured more than once, since the receipt of his opinion, to combine the submuriate of mercury with other medicines, when it appeared to me that the state of my patient's bowels required the administration of an active purgative?

"To his admirable course of instruction again and again attended, I refer with gratitude, the groundwork of any knowledge of midwifery I may happen to possess; and I have, consequently, been accustomed to regard his doctrines on subjects allied to his peculiar department, with a species of respect amounting almost to veneration. But, at a distance from the schools, and to a certain extent, from books, I have learned, during a practice of ten laborious years, to think occasionally for myself, and to shake off that slavish deference for authority, which too often characterises the outset of a young man's professional career. I have therefore thought attentively on the Doctor's suggestions; but no exercise of deliberation has enabled me to comprehend either the circumstances which led him originally to conjecture, or the basis on which he could afterwards have founded the more settled conviction that a combination of borax and cream of tartar (two of the simplest articles of the materia medica), which produces, he admits "*no sensible operation*," and requires to be continued *for three or four months*, has "an *especial* influence in removing *topical congestions or thickenings within the cranium.*"

"It may be urged that a prescription of this kind is, at all events, harmless. In *itself*, I freely grant that it is so, but not in its *consequences*, emanating, as it does, from such powerful authority. *These* may be not only mischievous, but *fatal*, by diverting the attention of the inexperienced from more efficient and less questionable means. But it is too obvious that even this brief opinion savours most strongly of those lamentable prejudices which so generally pervade that memorable volume wherein the virtues of the muriate of lime (which, by the by, likewise "produces no sensible operation, and may be continued for many months, not only with perfect safety, but also without any inconvenience or restriction whatever,")* are lauded to the skies; and the safety of prescribing calomel in croup—a practice for the more general introduction of which we are indebted to himself—is most seriously called in question.

"That grave men should violently persist (to use *partially* a quotation of his own from Professor Carlisle) in maintaining *prejudices so absurd*, is passing strange. Men starting into the exercise of the medical profession from a cloistered study of books, and from abstract speculations—men wholly unaware of the fallibility of medical testimony, and unversed in the

* Observations on the Use and Abuse of Mercurial Medicines, p. 115.

"Seventhly, After delivery no opiate should be given; but camphor, to the extent of from one to two scruples per diem, in the form of julep, as per recipe annexed (C), ought to be exhibited so long as the lochial discharge continues.

"Eighthly, The diet during lying-in must be regulated very much by circumstances. Mild animal food may probably be useful; but wine or other stimulants had better be avoided.

"Ninthly, If, after delivery, the use of the right hand and wrist be not restored, it may be worth while to try another course, *for three or four months*, of the powder (B), and to apply a succession of blisters to the nape of the neck.

"Lastly, Every preparation of mercury ought to be refrained from; and if, unfortunately, hydragogues or similar remedies be required, preparations of antimony with gamboge, or the compound powder of jalap or hellebore, are to be employed.

"The foregoing detail renders it unnecessary for me to make any farther remarks on the treatment pursued; but I cannot forbear adding, that I have very seldom received so accurate a detail of a case, and that I have still more seldom had occasion to approve so unreservedly of the practice pursued."

JAS. HAMILTON, JUN. M.D.

Edinburgh, 23, St. Andrew's Square,
September 24th, 1820.

FOR MRS. M.

(A) ℞ Extract. Hyoscyam. Nigr. ℥ss.
——— Colocynth. Comp. ʒj.
Ft. massa divid. in pil. æqual. no. xxiv. Sign. Laxative pills.

(B) ℞ Sub-Bor. Sodæ,
Supertart. Potassæ, āā ʒj.
Ft. dos. et mitte tal. no. xxiv. Sign. Powders, one to be taken only as directed.

(C) ℞ Camphor. ℈ij
Alcohol. gtt. xxx.
Sacch. Alb. ʒj.
Carbon. Magnes. ʒj.
Tere simul. probè, et adde paulatim Aq. fervent. ℥viij. Ft. julep. Sign. Two table spoonsful a dose.

J. H. JUN.

September 24th, 1820.

doubtful effects of medicines—may be themselves deluded, and delude others for a time; but when experience has proved their errors, it would be magnanimous, and yet no more than just to renounce them."

"Upon this noble principle, I am not altogether without hope that I shall yet see an ingenuous recantation on the part of my respected preceptor, of those fanciful opinions, which he must ere this have discovered, are viewed by his stanchest adherents as spots that tarnish the lustre of his otherwise brilliant reputation."

No. 2. *Dr. Davis's Opinion.*

29 George Street, Hanover Square,
October 2, 1820.

"In the time allowed for the drawing up of an opinion upon the case of Mrs. R. M. and especially on this day, it is not possible for me to enter into so minute a discussion of its several bearings as its able author appears to expect. The following remarks will contain briefly, indeed, but I trust distinctly, the results of my reflections upon it:

"1. I think the attack of hemiplegia was so far connected with the puerperal state, that probably it would not have taken place, had that state not been present at the time.

"2. The extraction of the tooth and its consequences, viz. the effects of the imprudent exposure to the action of cold, might have co-operated with a previously existing strong predisposition to cephalic congestion to produce the disease.

"3. Women are, in some degree, liable to apoplexy and paralysis, during the puerperal state. Dr. Orme met with five instances of sudden deaths at this period during his life of obstetric practice in London. Dr. Sims has seen three or four cases. I have met with two myself, together with four or five of apoplectic seizures and consequent hemiplegia. In almost all my cases, there existed that form of body which is considered as predisponent to diseases of this class: and I believe I may assert, that in every case, without an exception, there was more than an ordinary relish for food.

"4. I have met with several cases of partial paralysis from imprudent attempts to suckle without the ability. These cases have yielded usually to tonics and the tepid bath, nursing, of course, being abandoned.

"5. The treatment of the convulsions during Mrs. M's first labour was perfectly proper.

"6. The plan of treatment of the second labour, and of its consequences was, also, in my opinion, equally judicious, though less decidedly successful. I have given my sanction more than once to the extraction of a tooth during the convalescence after parturition. Dr. Sims (whom I met last night in consultation, and to whom I mentioned the interesting case of Mrs. M.) has often done the same. The extraction of the teeth should be considered separately from the exposure afterwards to the action of cold. The medical attendant was professionally answerable for the consequences only of the former. It is not to be presumed that the extraction of a tooth *per se* could materially conduce to occasion cephalic congestion: however, it might indirectly lead to it afterwards, in the event of mismanagement or neglect.

"7. With respect to the indication for earlier bleeding as a preventive measure, suggested in page 6th of the case; it is impossible for me to give a decided opinion. I can only say, generally, that we are not in the habit of treating the irritations and reactions now and then occurring after the extraction of a tooth by

so active a measure as venesection; and I would observe further, that in the circumstances related in this case, it is very probable, and *almost certain*, that I should not have thought of such a thing in my own practice.

"8. The entire sequel of the treatment has been so active and varied and judicious, that it has scarcely left room for an additional suggestion—much less an improvement on it.

"9. As to the regimen and remedies to be recommended, my opinion, will strictly coincide, I am persuaded, with that of Dr Musgrave. The general functions of the system should be kept as well balanced as possible. Any local *visceral* derangement, however temporary, will endanger the head. All causes of visceral derangements, should, therefore, as much as possible, be avoided. There is obviously a remarkably strong disposition to cephalic fulness. The state of the circulation should be frequently and nicely examined. Pregnancy is itself a plethoric state, in most cases, as well as often a state of irritation. Venesection is the most certain remedy of both states. The bowels should, of course, be kept in a soluble state. Small doses, daily or frequently, of neutral salts or magnesia, would perhaps meet this indication conveniently. The patient, if in moderate health, should take moderate and regular exercise—scarcely up to the point of fatigue, and never beyond it. As for food, it should be very sparing, and should consist principally, if not entirely, of vegetable matter.—This important measure of precaution must be attended to at the expense of any amount of inconvenience to the patient. As to suppers, they should be prohibited altogether; and on no account should meat be indulged in more than once a day; but I think it would be the safest plan to forbid animal food altogether.

"10. I am at a loss what to say as to the probable issue of the paralysis still remaining. I am, however, upon the whole, inclined to the opinion that it will eventually yield to the influence of time, assisted by the tepid bath and local stimulants; but electricity, in every form, should be avoided at present, as being calculated to induce premature labour.

"Should the above remarks serve the interests of the patient in any degree that may tend to the improvement, and finally perfect establishment of her health, I shall feel much gratified. They would have been more extended, had more time been allowed."

DAVID D. DAVIS, M.D.

These queries were sent off in the lady's third month of utero-gestation, and we must take up the case again, from that epoch. Dr. Musgrave, after evacuations had been premised, confined the patient to most abstemious regimen. She went on well—quickened at the usual period, and showed nothing unsatisfactory till the end of the sixth month, when, after some mental agitation, the motions of the fœtus were felt very violent, after which they became faint, and ceased altogether. But as the patient had no uneasiness in the head, back, or elsewhere, Dr. M. did not think

himself justified in giving any other advice than caution to keep herself quiet. One week after this period, the patient complained violently of pain in the right side of the head, with sense of intolerable oppression there. Her pulse, to Dr. M's astonishment, was only 37 in the minute, extremely full—"and with repeated and awful intermissions." Blood was instantly drawn from the arm *pleno rivo*, and some relief was experienced by the time that forty ounces were abstracted. The action of the heart then became less oppressed and irregular. She requested, however, that the venesection might proceed, and blood was accordingly drawn till the pulse rose to 84," with a corresponding improvement in every other respect. The quantity drawn amounted to 62 ounces. Purgatives were administered, and cold applied to the head. At nine o'clock the same night the pain again returned, and with it a diminution in number of the pulse, with some intermissions. In consultation, it was agreed to bleed again, and eighteen ounces were abstracted before satisfactory results were procured. Parturient symptoms manifested themselves in the evening—the shoulder presented—turning was effected, and a dead fœtus, of 6½ months, was extracted. The patient appeared to derive the greatest relief from the lochial discharge, and next morning declared herself free from complaint. In the evening, Dr. M. was summoned, and the patient declared her conviction that she was dying, "from that same sense of intolerable but defined oppression which had ushered in this attack, and her pulse was, as before, awfully slow, full, and intermitting." A vein was instantly opened, and thirty ounces of blood were abstracted before complete relief was obtained. There was no recurrence of untoward symptoms, and Mrs. M's convalescence was unusually rapid.

Now that the bustle was past, Dr. M. began to ruminate on the complaint and treatment, and he entertained some doubts, whether he ought not to have bled his patient when she first complained of the cessation of motion in the fœtus.

Mrs. M. was very shortly re-established in perfect health, with no vestige of her past sufferings left, except the weakness in her right hand, which still remained. She persevered in the most abstemious regimen, avoiding every kind of stimulus—keeping her bowels regular with the aloetic pill—and taking only such exercise as might conduce to health, without suddenly increasing the action of the heart. Under these severe restrictions, it was astonishing how speedily she regained flesh, strength, and spirits.

Nothing particular occurred till the beginning of 1821, when Mrs. M. again became pregnant, and in a few weeks afterwards, gave indications of cerebral fulness, which was removed by the lancet. All went on well till the close of the 7th month, when she announced a cessation of the active motion of the child, accompanied this time by a slight sense of weight within the head. Venesection was immediately had recourse to, and relieved the head: but labour came on in another week, and a putrid fœtus was expelled.

The lady continued tolerably well, with the assistance of one

venesection, till December, 1822, when she became pregnant, but aborted at the end of two months. Her recovery, as usual, was rapid and complete. In a few weeks, the 8th conception was announced, and the eighth month of it completed, without the aid of the lancet. Within about a fortnight of the full period, according to her own reckoning, Mrs. M. complained of the same lateral and circumscribed head-ache which had so often menaced her with death. Our author was sent for, and found the pulse as low as 44, full and intermitting. She was bled immediately, and relieved effectually. Eight days after this period, labour came on, and a small dead child was expelled. After this confinement, Mrs. M. suffered a severe attack of phlegmatia dolens, which gave way, at length, to the usual treatment.

This long eventful history is now near a close. In March of 1824, this lady required a large bleeding, on account of threatened mischief about the head. In May, she again conceived, for the *ninth* time, and miscarried in June. In August of last year, she was troubled with occasional sense of weight over the right eye, and at length observed that, on awaking in the night, she could neither articulate nor remember her husband's name. The loss of about eighteen ounces of blood produced faintness, and removed all complaint.

"Professor Burns, of Glasgow, says, in speaking of impracticable labour: 'How far it is proper for women in these circumstances to have children, is not a point for our consideration, nor in which we shall be consulted. I would say that it is not proper: but it is no less evident that when they are pregnant we must relieve them.' The remark applies with equal force to the case under review: and it would, indeed, be infinitely gratifying to me, could I elicit the observations of the able and experienced, through the medium either of the Medico-chirurgical Review, the Medico-chirurgical Transactions, the London Medical and Physical Journal, the London Medical Repository, or the Edinburgh Medical and Surgical Journal—all which periodical works are regularly forwarded to me through the post by the monthly mail after their publication. I would propose for attentive consideration the following queries:—

"1. To what is the premature death of the fœtus in utero, in this case, to be attributed?

"2. By what means is it probable that the state of the system may be so modified as to prevent this occurrence in future?

"3. Has Dr. Musgrave been guilty of any error, either of *omission* or *commission*, in the treatment of this case for the last four years; and *especially, ought premature labour to be induced by art in the event of any future pregnancy exceeding the term of seven calender months?*

"It may be as well to mention that Mrs. M.'s menstrual discharge, when in ordinary health, is tolerably regular in its returns, and natural in quantity and duration, although her periods seldom reach to the full extent of four weeks. A. MUSGRAVE, M.D."

"St. John's, Antigua, 4th November, 1824."

"P.S.—I had entirely closed my communication when the Medico-chirurgical Review for September (No. 2. of the New Series) came to hand. The extract inserted at page 356, from "the Observations of an Experienced Physician,"* it will be obvious, delineates with accuracy the circumstances of Mrs. M.'s situation.

"I have not time just now, as the mail will be made up to-morrow, to enter at length upon a discussion, from which I had purposely abstained, in detailing the facts of this case. Suffice it, therefore, to state, with reference to the queries submitted in these observations, and the replies of Dr. Beatty, that the suspicion of a venereal taint in the parents having acted upon the fœtus in utero, is here *entirely out of the question.* I have known the husband from infancy, and his moral character I have no hesitation in affirming to be indisputable. The two children now living enjoy, and have always enjoyed a share of health which cannot be exceeded under any circumstances, or in any climate; and had the father been infected since their birth, I am persuaded, from the terms of close intimacy which subsist between us, that the occurrence neither could nor would have been concealed from me. The exhibition of mercury, therefore, would be beyond measure absurd.

"That 'more blood has always circulated in Mrs. M's system than was consistent with the health of the fœtus,' is beyond all doubt and it only remains to be ascertained in parallel examples in what particular manner this plethoric tendency proves destructive, and by what means more judicious than those devised by me, this state of the system may be successfully corrected.

"I have, of course, indulged in my own speculations; but as I do not feel myself competent to *convey*, my object in giving this history to the medical public was exclusively, as I stated, to *elicit* information, as I was not aware, till it was concluded, that the attention of the profession had been already pointedly attracted to this particular species of premature labour.

"It is abundantly evident that Mrs. M.'s case furnishes a remarkable proof, in addition to those enumerated at page 446 of the number of the Medico-chirurgical Review already adverted to, that paralysis and cerebral lesion may be occasionally on the same side." 109.

We hope Dr. Musgrave will elicit some observations from our obstetric brethren on this point. Dr. Beatty's opinion on the case in question would assuredly be gratifying to Dr. Musgrave, and we trust he will be favoured with it through some of the channels pointed out. We have only one remark of our own to make, and that is, that because Dr. M. has no reason to believe that any syphilitic taint may be acting a part in this drama, "the exhibition of mercury would be, therefore, beyond measure absurd." We are far from thinking that a very gentle and cautiously administered course of mercury would prove pre-

* Transactions of the Association of Fellows and Licentiates of the King's and Queen's Colleges of Physicians in Ireland, vol. IV.

judicial to this lady's health, allowing there was no possibility of syphilitic taint. On the contrary, we should be inclined to such a measure, on account of the often-recurring tendency to cerebral affection. Nothing would have a greater chance of equalizing the circulation and producing a regular and healthy state of the secretions—and nothing, in our humble opinion, would give the lady a better chance of becoming the mother of a living child—*provided that event be desirable.* To this last question, we will not take upon ourselves to offer any answer; but we may be permitted to hint our belief that, all things considered, there does not appear to us to be so much to dread in a regular and full termed delivery, as Dr. Musgrave seems to apprehend, remembering that the lady has already borne two full-grown living children, and has a well-formed pelvis. But we leave the case to the experience of our obstetric brethren.

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6. *Substitute for the Cæsarian Section.* M. Baudeloque, the younger, has published in the Journal Universel, for July last, a proposal of this kind. The first incision is to extend along the outer border of the rectus muscle, from the umbilicus to within two inches of the pubis, not through the peritoneum. The waters are next to be let off, by rupturing the membranes, per vaginam. The thighs and legs being then half bent, the operator passes the fore finger into the inferior angle of the wound, removing the peritoneum carefully from the whole iliac fossa—and, when detached, one assistant raises up the peritoneum, and mass of intestines, whilst another maintains the uterus in its situation, by applying one hand on the belly. The operator is then to introduce his right hand into the abdomen, so as to explore the iliac artery, and ascertain if there be any arteries surrounding the vagina. "If there be any, I apply (says M. B.) a ligature at both extremities; and before cutting them, I take care to recognise the sub-pubian ligament, in order to avoid it." The bladder being emptied by the catheter, and the rectum by glysters, the left hand smeared with lard, is to be introduced parallel to the axis of the inferior orifice, when the vagina will be easily brought out beyond the external wound. Seizing the bistoury, he covers it with the three first fingers of the right hand, and plunges it into the vagina by the external opening, as far as possible below its insertion into the neck of the uterus, prolonging the incision to the extent of four inches and a half. This incision made, the fœtus is expelled, by the contraction of the uterus, into the abdominal cavity, in the same way as happens in rupture of the uterus or vagina. It may be extracted with forceps.

Another mode of operating differs from the above only in respect to the peritoneum, which is divided at the same time with the abdominal parietes. The rest of the operation is rendered more easy in consequence of the section of the vagina being thus capable of greater extension.

We shall only remark that the above operations appear to us most horrible, difficult, complicated, and, we venture to prognosticate, impracticable.

7. *Dropsy in Pregnancy.* Dr. Felici, of Milan, relates the case of a woman, 35 years of age, who considered herself pregnant in December 1817, soon after which a tumefaction appeared in the feet, and spread to the thighs, pudenda, loins, and abdomen, attended with much thirst. On the 2nd February, she was seized with fever, and acute pain in the left hypogastric region, with numbness of the corresponding thigh. These symptoms were combated by antiphlogistics and digitalis, except the thirst, which continued insupportable. The œdema increased—the swelling of the abdomen became enormous—the desire of making water violent and painful. The pain in the leg and thigh had greatly increased—there was difficulty of breathing—palpitations—a dry cough—wasting of the upper extremities—frequent pulse—sense of suffocation upon the slightest motion—puffiness of the face. Such was the poor woman's state when seen, for the first time, by Dr. Felici on the 6th March. The doctor suspecting retention of urine, introduced the catheter, and drew off *thirteen or fourteen pints of urine!* This operation, repeated twice in the same day, produced the evacuation of an equal quantity. Next day the symptoms were mitigated :—the catheter was passed twice. The fever and thirst continued—but the pain in the side was gone—the thigh could be moved—and the œdema of the lower extremities greatly diminished. On the 8th a purgative was taken, which procured several watery evacuations—but no urine discharged. The catheter again drew off as large a quantity as on the 6th. About noon labour came on —the fœtus and placenta were thrown off without accident, and there was no subsequent lochia. The catheter was used every two hours on the 9th, 10th, 11th, and 12th. On the 13th the abdominal swelling was entirely gone, as was that of the right thigh. It was not till the 18th that the patient was able to make water naturally, for the first time, and by the 31st was able to lay aside the catheter.

This was one of those cases which we occasionally see of immense distention of the urinary bladder. There was a man last year in St. George's Hospital who was supposed to labour under ascites, and paracentesis abdominis was in contemplation, when the house-surgeon happened to introduce a catheter, and drew off many quarts of water, with immediate reduction of the abdominal swelling.

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8. *Puerperal Neuritis.** Under this title, some papers have lately been published on the continent, especially by M. Dugés, who endeavours to draw a distinction between neuritis and neuralgia, by symptoms and by dissections. Acute neuritis is so rare and so rarely mortal, that anatomical evidence, on this point, is scanty. Reil, Portal, Breschet, Lobstein, and more especially Martinet, however, have proved the existence of inflammation of nerve, besides several writers in this country, as Sanders, Denmark, Wardrop and others. There is little doubt that both acute and chronic neuritis have often passed under the names of rheumatism, gout, &c.

* M. Dugés. Revue Medicale, Août, 1824.

and, indeed, M. Dugés himself appears to have fallen into this error in more than one instance. We shall cite a case to illustrate this. A woman, about 50 years of age, complained, in the course of the year 1819, of pains in her fingers, accompanied, at first with a sense of formication, and, afterwards, with a sense of coldness. These pains were constant. The painful parts became tumefied, and with difficulty moved. The pain, stiffness, numbness, and swelling, extended to the hands, and then it was confidently pronounced rheumatic gout. By degrees the malady gained the wrists, the forearms—the elbows, and, in the course of six or eight months, this unhappy woman was reduced to complete helplessness, as well as constant sufferings. The name of the disease was now changed from rheumatism to paralysis, and a host of stimulants were employed without benefit. The complaint extended to the shoulders—marasmus made progress—and this poor woman died in lingering and excruciating sufferings! There can be little doubt, our author thinks, that, had an examination been permitted in this case, neuritis would have been manifest.

In order to develop his ideas respecting puerperal neuritis with clearness, our author endeavours to distinguish five different varieties of the disease under consideration, viz. 1mo. *Simple* or circumscribed neuritis. 2ndo. *Œdematous*, that is, where there is a serous effusion not only in the cellular tissue of the nerve itself, but in the surrounding cellular structure. 3tio *Phlegmonous*, often producing suppuration in the nerve and surrounding parts. 4to. *Œdemato-Phlegmonous*, participating in the characters of the last two varieties. 5to. *Gangrenous*, ending in mortification of the nerve and surrounding tissues. On each of these varieties our author offers some observations, with illustrative examples.

1. *Circumscribed Neuritis.* This variety, he remarks, has almost always been attributed to compression of the nerve—but this does not always hold good. To it has generally been assigned the designation of *neuralgia*, which last, our author thinks, may be distinguished by the remissions or intermissions of pain; whereas, in *neuritis*, the pain is constant. M. Martinet has proved that inflammation of a nerve is not necessarily accompanied by swelling of the organ. This variety often runs its course or is subdued in five or six days—occasioning, at times, only some darting and temporary pains—at others, more acute and lancinating sufferings than the phlegmonous variety. It cedes more readily to sanguineous evacuations than the last-mentioned. Anodynes are of no use in it—but warm baths are of the greatest advantage. The sciatic nerve is the usual seat of this variety—sometimes confined to the pelvic region—sometimes extending to the thigh, the leg, and even to the foot.

2. *Œdematous Neuritis.* This is less frequent than the former variety, and generally less painful. It quickly produces œdema

of variable extent, sometimes occupying the whole of the inferior member—always assuming an active character at the beginning, and a passive one towards the conclusion. In this, the pain subsides in a little time, but the œdema continues obstinate, and then generally gives rise to swellings in the lymphatic glands of the groin, if the disease be in the crural nerve. In one dissection, our author found some purulent matter, as well as serous infiltration, in the nerve.

3. *Phlegmonous Neuritis.* This variety is not confined to the lower extremities; but sometimes affects the arms or fore arms of parturient women. Its most frequent seat, however, is the crural, or the sub-pubian nerves. It is often mistaken for common abscess —the nerve escaping the notice of the pathologist, even on dissection. Our author distinguishes it by the pain following the line of the nerve—by being of an extremely severe and insupportable character—by the swelling being prolonged in the direction of the nerve—by the swelling always *preceding* the redness on the skin, and *following* the pain of the part—by the swelling being harder and more unequal than in common phlegmon. On dissection, our author has generally found the nerve infiltrated with concrete pus disseminated among its filaments. Besides this, the surrounding cellular tissue, and sometimes the neighbouring muscles themselves, were infiltrated with purulent matter. At other times, a vast deposit of matter was found disfiguring and confounding all the parts involved in the disease—a state which he thinks most commonly obtains when the disease proves fatal.

4. *Œdemato-Phlegmonous Neuritis.* This is the phlegmatia dolens, about the nature of which so much has been written in this and in other countries. Our author observes, that general opinion attributes phlegmatia dolens to inflammation of the lymphatic system of the parts—and he believes that this opinion may be right, in some cases. But, from what he has seen of the disease, he is fully convinced that, in the majority of cases, the seat of the inflammation is primarily in the nerves, whatever other structures may be involved in the course of the complaint. In this doctrine he appears to be supported by the authority of *Gardien*, who uses the following words :—" si au tiraillement des nerves pendant le travail—si à ce tiraillement qui les rend plus susceptibles de produire, dans les organes auxquels ils se distribuent, un état inflammatoire, ou sur-ajoute la predisposition plus grande que doit produire l'état des couches, on aura une explication naturelle de la frequence de cette affection." This precisely accords with our author's sentiments. He does not notice, and probably is unacquainted with, the doctrine which our able countryman, Dr. Davis, has lately brought forward, respecting the primary seat of the affection.—Mauriceau and Casper are quoted by our author as favouring the doctrine of nervous inflammation being the cause of phlegmatia dolens. But it must be confessed that few of the theories of this disease are grounded on dissection—and those who have taken *post-mortem* examinations for their guide, appear to have been still

more led astray than those who have framed their opinions from the train of symptoms during life. The way in which pathology has led physicians into error, on this point, as on many others, we have have already shown in several places in this Journal. Our author candidly acknowledges that, in a dissection of phlegmatia dolens, related by Casper, there was neither swelling nor redness of the nerves. There was infiltration of the cellular substance in the neighbourhood of the nerves, and the lymphatics were diseased. No mention is made by our author of the state of the veins in Casper's case, and therefore we may conclude that there was no serious disease in them.

5. *Gangrenous Neuritis.* No example of insulated gangrene of a nerve can be found by our author on record. But then he is inclined to think, with Tommasini, that *inflammation* of nerve is often the cause of *gangrene* in the parts to which the inflamed nerve is distributed. This is Tommasini's doctrine. "Tommasini attribue à l'inflammation des nerves *toutes les phlegmasies gangreneuses.*" This, we think, is carrying theory too far.

Our limits will not permit us to analyse any of the cases brought forward by M. Dugés, in illustration of the foregoing observations. The cases indeed are not very satisfactory ones, and therefore we shall pass them over.

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9. *Separation of the Ossa Pubis.** It was thought by many, and by Chaussier among the rest, that, in every labour there was a natural separation of the ossa pubis, to a greater or less extent.—This opinion, we cannot think, with Dr. Nicholson, is, "at the present time much insisted on." We do not know any living anatomist or accoucheur who entertains such an idea. If indeed such a natural separation was credited, (excepting as an effect of disease, or as a serious accident) why should the proposal and actual execution of an *artificial* separation be brought forward in cases of difficult parturition?—It is sufficient to say that Boër, the Master of the Vienna Hospital, has not seen such a thing in twenty years—nor has it been observed in the Lying-in-Hospital of Dublin, where upwards of three thousand women are annually delivered. We shall therefore come at once to the subject of the present paper.

Case. Our author was sent for, on the 3d of December, 1820, to attend a lady, aged 21, in labour of her first child. She was healthy, and of a lively disposition, though delicate. He did not arrive until three hours after delivery; but an intelligent midwife assured him that the labour had not been severe, and that the placenta came away easily. He returned home. Next day she complained of some uneasiness and pain, without particularly describing its locality. The milk was duly secreted—there was no fever—and no apprehension was entertained. On the third day the lady put on her stockings, and moved, with assistance, to the fire-

* Dr. A. S. Nicholson. Irish Transactions, Vol. IV.

place. On the fourth morning she was totally unable to move her limbs—and informed our author that, while sitting at the fire, the day before, she felt sick, and fell off the low seat on which she was sitting. The nurse found her on the floor in a fainting condition. "In the course of the fifth day she was seized with frequent rigors, so violent as to shake the entire bed; and she complained of excruciating pain at the edge of the os pubis, and along the course of the left thigh. The fainting and rigors returned to such an excess, that I found it necessary to remain with her. Wine, and other stimulants were given, which soon alleviated these distressing symptoms. Her stomach, however, was at times much disturbed; and she was tormented with noise in her ears, and constant sneezing, which greatly aggravated the pain at the pelvis." The black drop was now of much use in relieving these symptoms. "On putting my finger," says Dr. N. "on the edge of the symphysis pubis, I found it to move distinctly, and a crackling noise was very perceptible to those who were present. She had great pain at the sacrum, and on examining it particularly, I found a tumour on each side of it, about the size of a hazel-nut, hard and circumscribed." Whenever she was moved the pain was agonizing.—Our author hinted his suspicions to the family that the pubes were separated, and requested a consultation. Meantime, strict rest was enjoined, and a broad firm bandage was applied round the pelvis, from which great relief was experienced. A solution of muriate of ammonia was applied to the tumours on the sacrum, and they soon disappeared.

"For nearly six weeks she remained perfectly well in her health, and easy in her bed, except when she attempted to move, or to turn on either side, on which occasion she always suffered the most violent pain. She could stretch her feet downwards, but could not draw them up again. She found relief from leaning forwards, and placing her elbows on her knees; and when that position became irksome, she returned to her usual one on her back, where she always felt easy. About this time she menstruated, and though much benefit was expected from this circumstance, yet no alteration took place in her complaint." 86.

Ten weeks after her confinement, Dr. Beatty saw the patient, with Dr. N. and on examination, found all the internal parts healthy and in their natural situation. On considering the seat of pain, however, and the inability of moving her limbs, no doubt was entertained that the symphysis had been separated. The broad bandage was continued, with cold applications to the seat of the pain.—A bandage to keep the knees together was also suggested by Dr. Beatty. After five months continuance in this melancholy state, our author was informed by Dr. M'Donnel of Belfast, that he knew a medical gentleman, whose wife had sustained an injury of this kind in a still severer degree; and Dr. M. kindly communicated some of the particulars to our author. It appeared that, for several days before labour came on, the patient suffered much from pain and weakness in her back, and a total inability of moving herself, which caused her labour to be unusually severe. "A crack-

ing noise could be distinctly heard at several yards distance, and not only were the pelvis (ossa ilia) and sacrum separated, but the disease seemed to have extended to the *functions* of all the bones of the pelvis." Many medical men were consulted, and many remedies tried, of course, but at the end of seven months no improvement had taken place, and her situation was deplorable. She now tried the shower-bath, and the good effects were soon apparent; for, in a few weeks, she was able to walk on crutches, and in two months to go up stairs. In three months she was fully restored to the use of her limbs, and has since had a living child.

The results of the above case were communicated to Dr. Nicholson's patient, and she gladly commenced the shower-bath. Before the expiration of a month, great relief from pain was experienced, and the patient was once more able to pull on her stockings and draw up her feet. She continued free from pain and in good health till December (12 months from her confinement) when she was injudiciously removed in a chaise from her father's to her husband's house. All the unpleasant symptoms now returned, accompanied with great pain, and the crackling of the pubis. She continued in a miserable state, without hopes of recovery; but on resuming the shower-bath and belt, she evidently improved. She was enabled to turn herself in bed—and at length was able to be wheeled about the garden in a little carriage. By the last accounts which our author had, she was able to shuffle across the room by the aid of crutches.

VI.

MEDICAL JURISPRUDENCE.

1. *Culpable Abortion.** In the following case there are some facts of interest, and some points for criticism, notwithstanding the high rank which the reporter has attained in forensic medicine.

Messrs. Foderée and Ristelhueher having repaired to the house of the deceased, on the 7th March 1822, they found the body of Catharine S. extended on a table, and already exhibiting marks of incipient putrefaction, although death had only taken place the preceding day, after a short illness. On examination, there was nothing particular observable in the chest. In the abdomen, the peritoneum was found inflamed, and some spots of inflammation on the mucous membrane of the stomach and bowels. In the neighbourhood of the uterus there was a sanguineous effusion, with some clots of blood, in the midst of which was found a fœtus of about 60 days' growth, with its umbilical cord. The womb was flattened, red, and inflamed. On more minute examination, it was found to be ruptured, the opening being about the size of a three franc piece. The internal surface of the uterus was also inflamed. The membranes

* Rapport sur une provocation d'Avortement par M. Foderée. Gazette de Santé, November, 1824.

of the fœtus were found perforated in two places—near the cervix uteri, and opposite the rupture in the parietes of the uterus, through which the fœtus had escaped into the abdomen. Nothing remarkable about the external parts of generation.

The medical commission called before them and examined several witnesses, by which it appeared that a midwife had been closeted with the deceased a day or two previous to her death, and had made use of a syringe with a long ivory pipe, which syringe was produced. Shortly after this interview, the deceased discharged a quantity of black blood from the vagina, and was seized with excruciating pains, which continued till death took place. From these data the Reporters came to the following conclusions :—viz. 1mo. That the deceased died of a violent inflammation with rupture of the uterus, followed by expulsion of the fœtus into the abdomen. 2ndo That this inflammation and rupture being rare accidents, and not likely to take place, except as the effects or consequences of a grave malady, in the last stage of utero-gestation, it was probable that they were, in this instance, the result of violence, from the forcible introduction of the pipe of a syringe into the os uteri, and the injection of some acrid and stimulating liquid into the cavity of that organ.

The jury found the midwife guilty, and condemned her to ten years' imprisonment.

Some strictures are made by the French Journalists on the testimony of Foderée. They observe that the medical man has no right to call or examine witnesses, in cases of this kind. He should confine himself to a rigorous examination of the body, aided by the light of physiology and pathology, leaving all matters of moral evidence to the investigation of the civil magistrate. This may be a good general rule ; but we think there are many exceptions to it. For instance, in the above case, had no information of instrumental interference been obtained, there was nothing in the body which could have authorised the surgeon to pronounce upon such interference. The rupture of the uterus was not considered as resulting from the operation of the instrument, but from the contractile efforts of the organ itself—and the rupture of the membranes opposite the mouth of the womb might surely proceed from the same cause. It was, therefore, the moral evidence that decided the question. We read lately of a case of spontaneous rupture of the uterus, at an early period of utero-gestation, though we cannot recollect where. This early period, therefore, is no proof of criminal interference, though, backed by the moral evidence, it becomes a very strong presumptive one in the present instance.

The case is otherwise instructive as showing the danger of procuring abortion by criminal interference.

XIII.

ANALECTA MINORA,

OR

MINOR PERISCOPE.

——————— sparsa Colligens.

1. *Extinction of Fire.* The Parisian Council of Health, report, that powdered sulphur, thrown on the fire in the grate, extinguishes, very quickly, a fire in the chimney above. A pound of the substance, sprinkled on the fire, is said to be quite sufficient for this purpose.

2. *Italian Remedies.* It is not in modern times alone that the Italians have surprised their brethren by the large doses of their medicines. Some 90 years ago the physicians of that country took it into their heads that cold water was the sovereign remedy for fevers and other complaints. They therefore gave from 15 to 25 pints of iced water daily to each patient labouring under fever, small-pox, dropsy, &c.!—*Commerc. Nov.* 1736. *Hebd.* 3. Tartar emetic is now the catholicon there.

3. *Pressure on the Perineum.* We observed, in one of the numbers of this Journal, that we did not conceive pressure on the perineum in labour to be a preventive of laceration of that part. Our observations seem to be partly confirmed by Dr. Collins, who (Med. and Phys. Journ. February) thus remarks:—"It has long been my opinion that the principal object of a prudent practitioner ought to be, to press the head of the fœtus, in its passage during a pain, against the arch of the pubes, and thus to diminish the pressure on the perineum. This mode of proceeding I consider much more eligible than pressure made on the perineum itself."—*Loco citato.*

4. *Therapeutic Agents.** M. Bally has reported from La Charité on the operation of certain medicinal substances, as observed by him at the above-mentioned institution. These observations we shall condense for the benefit of our readers.

1. *Sulphate of Quinine.* When vomits, leeches, or general blood-letting have not arrested intermittent fevers, our author has had recourse to this powerful tonic—always examining first the state of the mucous membrane of the stomach—this medicine being capable, he thinks, of kindling an inflammation of that part, if given unguardedly. He observes, however, that the sulphate of quinine is much less irritating to the bowels than the bark in substance—and, truly, so it is. In fact, we hardly believe that the sulphate of quinine has any irritating effect on the coats of the stomach, but rather a tonic and soothing influence. Our author cites a case of a child, four years of age, who each day, at a certain hour, experienced such violent colicky pains, that he lay screaming and rolling on the floor for some time. The sulphate of quinine quickly dissipated this affection, without producing any irritation in the stomach or bowels.

* M. Bally. Revue Med. Decembre, 1824.

2. M. Bally has administered the *Acetate of Morphine* in rheumatisms (acute) and with much success, by gradually increasing the dose. In one case, however, metastasis to the brain took place, and the cure was protracted to the twentieth day. It was in the month of June that he commenced his trials with *morphine*. He was at first led to think, with the chemists, that the salifiable base, not being soluble without acid, was incapable of exciting any action on the living body. He, therefore, gave it in doses of half a grain night and morning to eight or ten patients; and was not a little surprised to find that it acted with quite as much energy as the acetates or sulphates of the same substance. He was, in consequence, obliged to proceed with more caution, and to administer the medicine in doses of an eighth of a grain, or even less, every twelve hours. In these doses it produced a tranquil sleep. He relates cases of rheumatism and other painful diseases, where the morphine appeared to have an excellent effect.

3. *Extract of Lettuce.* This has been tried as a substitute for opium, by our author, and is much praised. But the preparation is more used and better known here than on the Continent, and, therefore, we need not stop to notice M. Bally's observations.

4. *Nitrate of Potash.* This medicine has been given in large doses, by M. Bally, in dropsies. It acted as a powerful diuretic. We shall introduce a short case in illustration. A young man, 25 years of age, at the close of an intermittent fever, treated by repeated application of leeches, became affected with dropsy, accompanied by the following symptoms:—dryness, discoloration, and flaccidity of the skin—puffy state of the face—extreme whiteness of the conjunctiva, which appeared entirely deprived of blood-vessels—constant thirst—high-coloured urine, and scanty—depression of spirits—disturbed sleep. The patient was twice purged with cream of tartar, but the symptoms remained the same. He was generally anasarcous, but more so in some places than in others. The circulation was very languid—the pulse slow and feeble—palpitations of the heart—tongue pale and covered with mucus. Nitrate of potash, in doses of two drachms in the day, and continued for a fortnight, produced a most copious diuresis, and the dropsy entirely disappeared.

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5. *Tinct. Flor. Colchici.** It is a presumptive proof that colchicum autumnale is a valuable medicine, when we find different preparations of it extolled, each as superior to all the others. It is, in truth, a most important medicinal agent in many complaints, but especially in gout, rheumatism, and inflammatory affections of the respiratory organs.

Mr. Bushell, a very intelligent practitioner of this Metropolis, has, for some time past, employed the flowers of colchicum in tincture, and speaks highly of their good effects. The tincture is prepared as follows.

R. Flor. Colch. exsiccat et cont. ℥j.
Spir. Tenuioris octarium unum,
macera per dies septem, et cola.

We observe by the cases brought forward in Mr. Bushell's report, that he gives this tincture in drachm doses every six hours, lessening the quantity as the symptoms abate. In these doses, the medicine keeps up a pretty sharp action on the bowels and skin. We think this tincture must be

* Mr. Bushell Med. Repos. February 1825.

weaker than the vinum colchici, for the latter could not be given in such quantities, without risk of considerable action on the stomach and bowels. The cases adduced by Mr. Bushell were principally acute rheumatism, and one of chronic iritis. They prove the efficacy of the medicine unequivocally, as it was given in simple distilled water, without any other therapeutic agent, and soon dissipated the complaints for which it was administered.

The flowers of colchicum, which are produced in September, possess the acro-narcotic odour, and contain a considerable quantity of acrid mucilaginous juice, which renders them difficult to dry. Not only the petals, but the whole flower-tubes should be gathered for use.

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6. *Old Ulcers.* Although Wiseman has recommended laced-stockings in some cases of chronic ulcers on the legs, yet we believe it was only about half a century ago that the practice of pressure and bandaging, *i e.* Baynton's method, was first brought forward, by Mr. Else, Surgeon to St. Thomas's Hospital. He acknowledges that he learnt the method from an apothecary in Half-Moon Street, Piccadilly, who became celebrated for curing old ulcers of the legs by tight-bandaging, and *five drops* of a secret nostrum twice a day. Mr. Else offered to give the apothecary the contract for supplying the hospital with the secret remedy, but the apothecary wisely observed that the medicine would not cure old ulcers unless administered by himself! Mr. Else then took to the tight bandaging, by means of a roller applied from the foot to the knee, with a thin piece of lead laid over the sore, which was first dressed with cerate. The bandage was laid on so tight as to make the leg feel numb, and the success was general. Every one may see that this is, to all intents and purposes, the method from which Baynton derived so much credit.—*See Medical Observations and Enquiries, for* 1772, *vol.* iv. *p.* 352.

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7. *Volatile Oil of Cubebs.* We are informed by Mr. Battley that, upon a recent examination of cubebs, he found an *extremely volatile oil*, in the proportion of one ounce and a quarter to the pound. In this oil he apprehends the virtue of the drug to reside,—and, if so, the great uncertainty of its effects on disease may be readily accounted for by the supposition that, in many instances, the medicine, when administered, has contained the oil, while in other instances, the oil may have escaped. If the virtue of the substance should be found to reside in the oil, we apprehend the discovery will be a very important one, as we shall then have a remedy for gonorrhœa in as small a compass as we have for ague in arsenic or quinine. We advise trials to be immediately made with the oil.

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8. *Intro-Uterine Vociferation.* Some incredible stories have been related of infants crying in the womb. God knows they cry enough after emerging from their prison house! We have applied the term *incredible* to the former instances, because it was said that the infants cried while head, body, and extremities were in the uterus—a thing almost beyond belief. In the present instance, M. Marc has read to the Royal Academy of Medicine, the case of a head-presentation, where it was deemed proper to turn, in consequence of pelvic deformity. When the lower extremities and body were extracted, the child cried distinctly, three times, before the head was delivered. The child died almost immediately after birth. Here there was no compression of the uterus on the body, and, it is *possible*, some air might be in the cavity of the womb after turning, which might allow the act of imperfect respiration, and empower the infant to cry.

XIV.

BIBLIOGRAPHICAL RECORD;

OR,

Works received for Review between the 20th of December, 1824, and the 15th of March, 1825.

1. An Estimate of the true Value of Vaccination as a Security against Small Pox. By T. M. GREENHOW, Member of the Royal College of Surgeons; Surgeon to the Lying-in-Hospital, &c. Octavo, pp. 75. December, 1824.

☞ This little work is very well calculated for the general reader to whom it is principally addressed.

2. Revue Medicale, Francaise et Etrangère; et Journal de Clinique de l'Hotel Dieu et de la Charité. Novembre, 1824. (*In exchange.*)

3. A Treatise on MOXA, as applicable more particularly to Stiff-joints: illustrated by Cases and Plates: with some general Observations on Spinal Diseases. By JAMES BOYLE, Esq. Surgeon to the Middlesex Infirmary. Author of a Treatise upon the Epidemic Cholera of India, &c. &c. Octavo, pp. 168. Callow and Wilson, 1825.

4. An Analysis of Medical Evidence: comprising Directions for Practitioners, in the View of becoming Witnesses in Courts of Justice; and an appendix of professional Testimony. By JOHN GORDON SMITH, M. D. Octavo, pp. 386. Underwoods, January, 1825.

5. Revue Medicale, Francaise et Etrangère; et Journal de Clinique de l'Hotel Dieu et de la Charité. Decembre, 1824.

6. The Westminster Review. No. V. January, 1825.

☞ Among the numerous articles in this rising work, we notice a laboured, and certainly an able one, on the subject of Quarantine Contagion, &c. While we differ from the writers of that article in the view which they take of contagious diseases generally, we award to them the full meed of praise for the talent which they evince in the construction and support of their arguments.

7. Dissertatio Chemico-Physiologica de Sanguine, ejusque mutationibus Auctore, CAROLO J. B. WILLIAMS, M. D. Ed. 1824.

☞ This is an ingenious Thesis, and contains several curious experiments illustrative of the subject discussed.

8. An Essay on Venereal Diseases, and the Uses and Abuses of Mercury in their Treatment. Illustrated by Drawings of the different Forms of Venereal Eruptions. By RICHARD CARMICHAEL, M. R. I. A. Vice President of the Royal College of Surgeons in Ireland, and one of the Surgeons of the Richmond Surgical Hospital, &c. &c. Octavo, pp. 376, with five beautifully coloured Plates. (Second Edition.) London and Dublin, March. 1825.

☞ This valuable Treatise (which is, in fact, an almost entirely new publication) will be certainly analyzed in our next number.

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6. A Compendious System of Midwifery, chiefly designed to facilitate the Inquiries of those who may be pursuing this Branch of Study. Illustrated by occasional Cases. With Engravings. By W. P. Dewees, M. D. Lecturer on Midwifery, &c. Octavo, pp. 602. Plates. Philadelphia, 1824.

This is a very valuable compilation, containing a good deal of original matter, and evincing very considerable research and judicious observation.

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10. Revue Medicale Francaise et Etrangère, et Journal de Clinique de l'Hotel Dieu, &c. Jan. 1825.

In Exchange.

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11. Report of the Physician of the Small-Pox and Vaccination Hospital. By George Gregory, M. D. Octavo, sewed, pp. 15. February, 1825.

See Extra Limites.

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12. System of Anatomical Plates, with descriptive Letter-Press. By John Lizars, F. R. S. &c. Lecturer on Anatomy and Physiology, Edin. Part VII. The Brain. First Portion, coloured after nature. 1*l.* 1*s.* coloured.

This fasciculus contains several plates of the Brain and Spinal marrow, most beautifully coloured. and, in fact, exceeding, in fidelity and spirit, all the parts that have gone before.

In the Bulletin des Sciences Medicales, for January of the present year, we observe the following notice of this meritorious performance:

"Cet ouvrage se continue avec activité. Les planches sont coloriées. Les quartre parties que nous avons sous les yeux nous paraissent propres à rendre familière aux jeunes gens qui se destinent à l'art de guérir, l'étude et la connaissance approfondie des systêmes osseux, musculaire, nerveux, et vasculaire, du corps humain."

Such a testimony from foreigners must be gratifying to the author and convincing to the public. Mr. Lizars apologies for the delay in the appearance of the present fasciculus—a delay occasioned by the great care necessarily taken up with the colouring of the plates of this very minute and important organ—and which the author found to be indispensably requisite, in order to give a clear and distinct development of its various portions. These considerations are sufficient reasons why this and the next fasciculus should appear entirely coloured.

We wish Mr. Lizars a continuation of that success which he eminently deserves.

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13. Observations on the Use of the Colchicum Autumnale in the Treatment of Gout; and on the proper Means of preventing the recurrence of that disorder. By Charles Scudamore, M. D. F. R. S. Member of the Royal College of Physicians, &c. &c. &c. Octavo, pp. 116. 1825.

☞ In our next.

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14. Elements of Medical Jurisprudence, By Theodore Romeyn Beck, M. D. &c. &c. &c. Second Edition, with Notes, and an Appendix of original Cases and the latest Discoveries. By William Dunlop, Esq. &c. Lecturer on Medical Jurisprudence. Octavo, pp. 640. London, March, 1825.

We gave our meed of praise to the original American Edition. The present republication in this Country is much improved, and, as it stands, forms one of the best systems of medical jurisprudence which we possess. We shall take some further notice of this edition in our next.

15. An Account of the Disease lately prevalent at the General penitentiary. By P. MERE LATHAM, M. D. Fellow of the Royal College of Physicians, and Physician to St. Bartholomew's Hospital. Octavo, pp. 286. London, March, 1825.

In our next.

16. An Elementary Description of the Anatomy and Physiology of the Brain, Vicera of the Thorax, Abdomen, &c. with corresponding Questions, designed more particularly for the Use of Gentlemen preparing for Examination at Apothecaries' Hall, also for junior Students. By a Licentiate of the Society of Apothecaries. London, March 1825. Price, 2s.

17. A Letter to the Right Honourable the Earl of Egremont, on the subject of a Sussex County Hospital at Brighton. By W. KING, M. D. Fellow of the Royal College of Physicians, &c. Brighton, March 1825. Pp. 16, price 6d.

This letter, which is well written, contains many suggestions which we hope will be taken into consideration by the managing committee of the new Institution at Brighton.

18. Part Second of a Series of Elementary Lectures on the Veterinary art; wherein the Anatomy, Physiology, and Pathology of the Horse are essayed on the General Principles of Medical Science. By WILLIAM PERCIVALL, Member of the Royal College of Surgeons in London, &c. &c. Octavo, pp. 558. Longmans, 1825.

See what we have said of Part the First.

19. Proceedings of the Sixth Anniversary Meeting of the Hunterian Society, held on 9th February, 1825.

We are glad to observe that this Society flourishes.

*** NOTE.—Authors and publishers will readily appreciate the importance of having their works recorded, with full length titles, on this list, which stands as a perpetual advertisement so long as the Journal lasts, and as far as it extends. The republication of the Journal in America enhances the advantages of the BIBLIOGRAPHICAL RECORD, on which no work can be entered, unless transmitted, free of expense, to the Editor, under sealed cover to the publishers, or in any other way most convenient to the parties concerned.

MEDICO-CHIRURGICAL REVIEW.

(American Edition.)

All the back numbers of this Journal, from No. 1 to No. 16, inclusive, have now been imported (by permission of the Editor) by Messrs. Burgess and Hill, who can supply gentlemen with complete sets, according to order.

The American edition is printed verbatim from the London edition, and detached numbers will correspond so as to complete imperfect sets without any deformity to the work.

55, Great Windmill Street, March 20th, 1825.

XV.

EXTRA-LIMITES.*

I.

***Observations on the dangers liable to result from the* less frequent *Use of the Trephine, in Fractures of the Cranium with* Depression, *illustrated by Cases.* By Richard Wise, Member of the Royal College of Surgeons in London, Extraordinary Member, and late President of the Royal Physical Society in Edinburgh.**

> Dico quòd per ametionem ossis non additur malum malo; sed removetur malum a malo; nec etiam in osse operari est tam grande malum, ut putant aliqui.
>
> *Berengarius*, cap. xxv.

The dangers which so often succeed to wounds of the head, and the frequent obscurity of their commencement and progress, have, in every age, from the time of Hippocrates, to the present day, been universally acknowledged: the mode of treatment, however, has, unhappily, ever been, more or less a subject of controversy, and at no period, perhaps, has this been more conspicuous, than about the close of the last century.

The propriety of the general practice of applying the trepan in fractures of the cranium, which, about that time seemed to have been pretty well established, not only in this country but throughout the continent of Europe, was at once disputed and put down by Desault, who even went so far, as almost to proscribe its use in every case. This innovation, from one at the head of his profession in the metropolis of France, both as a practical surgeon and a lecturer, was not only readily and implicitly received by his numerous pupils at home, but was also soon favourably noticed, and partially supported, in the lectures and writings of some of the most eminent teachers of surgery in this kingdom, who now supposed it probable that the operation had been performed too frequently and unnecessarily by Mr. Pott and others.

But whether Mr. Abernethy, in his "Surgical Observations on Injuries of the head," intends to discountenance the use of the trephine in fractures of the cranium *with depression*, so far as Mr.

* The Extra-Limites of this Number we give at our own expense, as a bonus to Subscribers, and a mark of respect to the authors. We shall be ready to honour select Essays of merit with this distinction, from time to time, in the succeeding Numbers of our Work, and beyond the established limits.—*Editors.*

Samuel Cooper appears to have conceived, seems to me questionable. For the deductions which Mr. Abernethy has drawn from such of his cases as did well, without the operation, should, I think, be received rather as speculative suggestions, held out for the consideration of others, than as established practical precepts, of the value of which that gentleman was himself fully satisfied.

The injunctions, indeed, laid down by Mr. Cooper, are the most unequivocal, and decided. *"That every surgeon cannot be too fully impressed with the following truth, that *existing symptoms of dangerous pressure on the brain can alone form a true reason for perforating the cranium.*" †"Before beginning the description of the operation, I think it highly proper to remind the reader of what has been so forcibly dwelt on in the" article "Head, Injuries of." "That the removal of the pressure off the brain, which pressure must also actually occasion dangerous symptoms, can form the only true and vindicable reason for employing the trephine, or sawing away any portion of the skull."

"It should never be undertaken but in the most pressing circumstances, and when the symptoms unequivocally show that a dangerous degree of pressure on the brain exists." "The symptoms indicating compression of the brain, and these symptoms must also be urgent and alarming, can alone justify an examination of the fracture."

With the greatest deference to the judgment, experience, and elaborate research of this respectable, and popular writer on surgery, I would beg to ask, whether, in the above practical inculcations, the attention is not *too exclusively directed* to the *immediate* symptoms of *functional* derangement of the brain, as *alone* affording a true reason for perforating the cranium, or as justifying even the examination of a fracture, as if this were the only circumstance, in such cases, from which danger could be apprehended: thereby, in depressed fractures, unaccompanied by such immediate symptoms of compression, setting wholly aside, and losing sight of the inflammation, and often fatal consequences that may result from allowing the irritating pressure of broken bone to remain on the brain and its membranes unelevated.

Could Mr. Cooper satisfactorily prove, that the slightest degree of pressure, from depressed bone, would at all times give rise to immediate functional derangement, then, indeed, might we, inasmuch as it would also inform us of the pressure, which might *induce inflammation*, with safety, perhaps, rely on this indication, for the performance of the operation. But no, this gentleman, himself, tells us, that it is extraordinary and unaccountable, but no less true, that no calculation of the functional derangement can be made by the degree in which a part of the skull is depressed, and, in confirmation of this, quotes a late eminent writer,‡ who has detailed some most interesting cases, as occurring amongst the wounded in the battle of Waterloo, wherein very *considerable depressions*

* Surgical Dictionary, 3d Edition, Article "Head," page 897.
† Article "Trephine."
‡ Dr. Thompson.

produced no *stupor, paralysis,* or *loss* of *memory,*—in short, no *functional derangement.*

Yes; such are the physiological and pathological peculiarities of these parts, that it is possible for a portion of broken bone to be so depressed, as not only to bear considerably on the dura mater, but to pierce that membrane, and even to enter the brain itself, without producing immediate functional disturbance, or any other symptom to indicate the true nature, or extent of such an injury. Nay, it frequently happens, that the irritating pressure of the bone thus situated, gives rise to inflammation and suppuration, terminating in death itself, without causing pain, or exhibiting any other sign, to warn us of the danger, till the patient is beyond the reach of help.

This is indeed an assertion, in the belief of which we cannot, at first, perhaps, but feel somewhat sceptical, particularly when we think of the sufferings, which accompany even the slightest inflammation of the eye—of the ear—of the finger, in paronychia —or of any external part of the body.—But when we call to our recollection how abundantly all these parts are supplied with nerves, whilst the membranes of the brain have, in all probability, *none,* it cannot but, in some measure, reconcile us to these discrepancies.

Numerous have been the experiments performed by Haller, Zinn, and other eminent physiologists, in proof, not only of the insensibility of the membranes, but also of the brain *itself.** "The dura mater has, by way of experiment, been pinched, and injured by every possible contrivance, both by mechanical and chemical stimulants, yet the animals have given no signs of pain." Haller says "Dura mater absque sensu, aut irritabilitate, et absque *nervis* est."†

Case 1. In proof of the *pathological obscurity,* Mackreen gives a remarkable case, in which several fragments of the bone penetrated even to the ventricles of the brain, yet the man walked home unassisted. He lived from the 23d of February to the 11th of March, during which time there was daily lost a spoonful of the very substance of the brain—his speech—intellect—and judgment being all along perfect—nor was it *till death* was fast approaching, that the delirium—fever—or other symptoms came on.

Case 2. In the "Medical Repository" for October 1824, Mr. Dickson relates the sudden death of a sailor, aged 50, in the act of rowing. On the removal of the dura mater, falx, &c. after death, there was found upon the middle lobes of the brain, where they came in contact with the falx, a considerable quantity of thick, grey coloured pus, most of which lay in a cavity formed by ulceration of the approximating portions of the middle lobes. That portion of the falx, which bisected the abscess, was diseased, and was pervious to the abscess.—The convolutions of the brain abounded

* Bell's Anatomy, Vol. 1. † Primæ Lineæ Physiologiæ, Cap. x. cccxx.

in serum, and the lateral ventricles contained each an ounce and a half of serous fluid. Yet, from the man's messmates, it appeared that he had not complained for some months previous—that he had done his duty—eaten his allowance—and drank his "pint" like others.

In the "Medical and Physical Journal" for January 1821, there is a case given, wherein the operation of trephining was performed a fortnight after the receipt of the external violence; and it was stated in evidence, at the coroner's inquest, "that the patient followed his accustomed bodily labour, for five days after the infliction of the injury—but, that on opening the body after death, the skull was found to be *extensively fractured*—and that several spiculæ of bone had actually *been driven into*, and produced *disorganization of the substance of the brain* itself, although *fourteen* days had elapsed before the usual symptoms manifested themselves."

Though the brain and its membranes may thus sustain the severest local injury from depressed bones, without giving rise to *immediate pain*, or *functional disturbance*, are we to infer, that the continuance of pressure, because at first not openly offensive, will not excite inflammation?—Would a fragment of glass, found thrust into a *palsied* limb, be deemed innoxious, merely because the patient had *no pain* to complain of?

Were it proved, or even contended, that the brain and its membranes are equally unsusceptible of inflammation as they are of immediate pain, from *irritating* pressure, we might, indeed, be less anxious to inquire into the precise nature of depressed fractures. *"But, of all parts of the body, these are most prone to inflammation, especially were the irritation is made *through the bones*, though, in no part is its progress, and that of suppuration, so obscure, so insidious, or so deceptive, and, when far advanced, so unmanageable, and where it so often baffles our art." Indeed, every hour convinces us, that inflammation may be induced even by the slightest mechanical pressure, and, we should frequently suffer from its operation, but for the ever protecting sensibility with which every external part is endued. Yet, however indispensable to our immediate security this general diffusion of nerves, such a supply to the membranes of the brain, amply protected as they are, by the bony walls of the cranium, would seem unnecessary, though, were they equally so, their pathology, would, no doubt, be less obscure. Nor should we then find so many unhappy cases on record, where the effects of injuries of the head had proceeded to an irremediable extent, without one symptom to denote, or warn us of the existence of danger.

In further proof that depressed fractures, though considerable, do not always give rise to immediate pain or functional disturbance,—of the dangers that may result therefrom, notwithstanding —and of the insidious progress of inflammation, consecutive thereto, I will relate, briefly, the following cases.

Case 3. Hercules Bishop, aged 14, in descending a copper

* Bell's Operative Surgery.

mine, by a ladder, received a small wound in the head, by the fall of a stone. He took little notice of the accident, and continued to his labour, without complaint, for the next *twelve days*, when he became ill. My father was requested to visit him, for, what his friends thought, a fever, as they had not the least idea, that the wound of the head, which had not even been seen, or dressed, for some days, was at all connected with his present illness; for it is probable the circumstance of his having received it, would not have been noticed, had not the questions put, brought it to their recollection. His pulse was quick, and skin hot. He had low muttering delirium, with stupor, and occasional twitchings. On examining his head, there was found, over the middle of the left parietal bone, a small wound, the edges of which were slightly inverted, and flabby. On introducing the probe, there was discovered a fracture with depression. The integuments were now laid back, and the fracture exposed, when a portion of bone, about half an inch in length, and a quarter in breadth, was found, not only depressed, but partly sunk into the dura mater. The trephine having been applied, and the depressed portion of bone elevated, a considerable quantity of fetid matter was discharged, and the dura mater was observed to have a gangrenous appearance. The operation did not relieve any of the symptoms. He lingered till the following morning, when he expired.

Case 4. "An herb-man was struck upon the forehead, near the coronal suture, by a blunt instrument. Subsequent to the blow, he experienced a tendency to syncope. He came into the hospital, and, till the *eleventh day*, there were no untoward symptoms, but every thing portended a favourable issue. On that day, however, he was then seized with violent fever, which commenced with rigor, and excessive vomiting of bile; and he had a daily recurrence of febrile symptoms till the fourteenth day from the blow, when some hebitude was observable. A few hours afterwards, he became senseless, respired with difficulty, and died before the end of the day.

Dissection. The os frontis was slightly depressed, and an unequal and sharp lamina had been detached from its inner surface, and had wounded the dura mater, and, consequently, pus had formed betwixt that membrane and the pia mater, whence it had descended from the vertex nearly to the base of the cerebrum, and also to the bottom of the cerebellum, on the corresponding side.*"

Case 5. William Holman, a child aged two years, fell through a hole in the floor, into a room underneath, on its head, a slight tumour soon arose, and vomiting came on. The child lay in a comatose state several hours, after which he gradually became sensible, and apparently as cheerful, and as free from complaint, as he had ever been. Things remained in this state more than a fortnight, when he became fretful, restless, and feverish. The

*Cooke's Morgagni, vol. I. p. 216.

tumour, which was small, for some time after the accident, had, during the last two or three days, become larger, and was now the size of an egg, and soft as if containing pus. In this state, the child was brought to me. Having had the history of the case from the mother, my partner, Mr. Vincent, and myself examined the tumour, and conceiving it to be an abscess, I laid it open, when, to our mutual surprise, a great quantity of brain, and fetid matter was discharged. Having introduced a probe, we readily discovered a fracture, with depression, and, on exposing it, found the sunken portion of bone had penetrated the membranes into the brain. As it was loose, we removed it with the forceps, and more brain was discharged. The child did not appear to be relieved by this, but, on the next day, seemed in a dying state; however, in this melancholy condition, he passed the four following days, and then expired. From the period of opening the tumour, to the death of the child, brain mixed with blood, was continually discharged, and so offensive was the stench proceeding therefrom, as to render it almost impossible for any one to enter the room where the child lay, the fond mother only excepted, who continued to her infant the most unremitted attention to the last moment of its existence.

Case 6. (The 11th of Mr. Abernethy.) The coachman. A piece of bone, in this man, the size of a sixpence, was slightly depressed. No bad consequences appeared for two months, when the bone was removed. The patient after lingering for some time, expired. The whole right hemisphere of the brain was found reduced into a pulpy and fetid mass.*

Case 7. (I was favoured with this, by Robert Liston, Esq. lecturer on surgery). "A coachman in Edinburgh was knocked down off his legs. He fell on the corner of a stone, which broke off, and stuck into the bone. The stone was picked out—he was bled, and the wound dressed. He continued to drive his coach till the *following Sunday*, *without complaint*, when he returned home shivering. I (Mr. Liston) was now sent for. On examining the wound, which was situated about the posterior superior angle of the right parietal bone, a portion of which, about an inch long and half an inch wide, was found depressed half an inch. The integuments had separated, and were pulpy. The bone was denuded and pale. The pupils dilated, pulse 60, and oppressed. He was bled ad uncias xij.—blood buffy—somewhat better, though there is stertor. *Monday*, I saw him with Dr. S. and Mr R.—Returned at 8. P. M.—applied the trephine, and raised a number of splinters from the dura mater, chiefly from the inner table. The membrane was found depressed, and the splinters mixed with curdy matter. The dura mater rose to its level. He is now more sensible.—*Tuesday*. Answers questions unwillingly, and complains of head-ache—pulse quick and full—pupil contracted, and

* I must beg to refer the reader, for a full detail of this and the other subsequent cases, already in print, to the works in which they are respectively given.

more sensible to light—restless during the night—no stool. Emittatur e brachio sanguis ad uncias xxiv.—a large spoonful of a saline opening mixture, omni horâ. *Wednesday.* Seized with convulsions last night, relieved by bleeding, but they returned, and he died at one this morning. Sectio.—Dura mater sound—about *four ounces of flaky matter* lying over the surface of the tunica arachnoides, brain sound."

The above are not only valuable, as well-marked cases of fracture of the cranium with depression, not giving rise to immediate functional disturbance, and of the obscure progress of inflammation; but they must also impress us forcibly, that the inflammation and its fatal effects arose chiefly from the *irritating pressure of unelevated broken bone*, and on comparing this with the seven cases presently to be detailed, may we not very fairly infer that the unhappy consequences might have been *prevented* by an early application of the trephine?

Case 8. John Edwards, aged 23, whilst in a scuffle, had a stone thrown at him, by a person unknown. It struck him on the hinder part of the head, just below the lambdoidal suture. He was stunned immediately after the accident, but soon recovered, and was able to walk to my house, the distance of half a mile. On examining the wound with a probe, I at once discovered a fracture with depression, and, by exposing the injury, a small triangular portion of the occipital bone depressed about a quarter of an inch. I applied the trephine, elevated the depressed portion, and brought the integuments together, which readily united by the first intention. No exfoliation took place. In the space of three weeks he was able to return to his labour.

Case 9. Henry Skewes, aged 20, was struck on the head with the point of a reaping hook. On examining the wound, which was about the posterior superior part of the parietal bone, near the longitudinal sinus, I found a fracture with a small portion of bone depressed. There was no functional disturbance. On attempting to elevate the depressed part, after the application of the trephine, it broke off. The edges of the wound were brought together, and it healed in about ten days, without a bad symptom supervening.

Case 10. (The 10th of Mr. Abernethy). The drunken woman. A circular piece of bone was beaten in, to the depth of a quarter of an inch. The trephine was applied—the shattered and depressed bone removed, as was also a clot of coagulated blood, as large as a walnut. She shortly became perfectly well.

The four remaining of these cases are, besides, particularly interesting, and deserving attention, inasmuch as they must convince the most timorous that extensive exposures of the dura mater, or wounds of that membrane, or even of the brain itself, from depressed bone, are not necessarily fatal—or so frequently dangerous, or, indeed, so liable to give rise to alarming symptoms, as they are, by some, supposed and represented, provided the same pre-

ventive measures be, in all such wounds, promptly attended to, which are ever judged indispensably necessary, in those of every other part of the body—namely, the careful removal, in the first instance, of all *foreign bodies*, of whatever nature, which might prove a *source of irritation.*

Case 11. Richard Kneebone, aged 14, got his head crushed in a thrashing machine. I found the scalp reverted from the left ear over the right side of the head, exposing nearly the whole of the parietal bone, the anterior superior part of which, about three inches over, was deeply depressed. He lay quite insensible, his pulse slow, and the pupils dilated, indeed he appeared altogether so much like one in a dying state, that the friends, at first, objected to my doing any thing for him. I found it necessary to make two perforations, to elevate the sunken portion which broke off, in the act of raising it. The dura mater, now so *extensively exposed*, rose to its level, and the boy soon became somewhat more sensible. The scalp was brought down, as nearly as possible, to its former situation, and was secured by a few stitches, except at the inferior angle, which was much contused. Pretty much blood was lost from the accident, and during the operation. The wound being dressed, a purgative was ordered. He slept the whole of the night, and by the next morning, his senses had completely returned. On removing the dressings, the third day, a union of the edges had taken place, except at the lower part. The boy, notwithstanding this extensive injury, had not a single bad symptom after the operation, and was, in about a month, quite recovered.

Case 12. A soldier, of the 44th regiment, who was wounded by a musket ball, at the battle of Waterloo—a case of Mr. Samuel Cooper.* "The splintered bone was, at one point, driven more than half an inch into the membranes and substances of the brain. The trephine was applied, and on the same day this patient got up, and dressed himself, without leave of the medical officers, and never had a bad symptom afterwards."

Case 13. A man, in descending a copper mine, was struck on the head by the fall of a stone. The force was so great as not only to fracture the bone, but to force one end of the portion through the membranes, into the substance of the brain. The application of the trephine was found necessary for the removal of the sunken portion, which being effected, some brain was discharged through the opening, as there was also, during several of the first dressings, yet the patient, to the great surprise of my father, so far recovered, in a few months, as to return to his labour.

Case 14. (Mr. Crawford's.) In this boy, about three years of age, the wound was *extremely small.* There was, however, an

* Surgical Dictionary, article "Trephine."
† Edinburgh Medical and Surgical Journal for January 1819.

evident depression—though no *evident symptoms of compression*. Notwithstanding the generally received rule, says Mr. Crawford, *not to interfere, unless such symptoms do actually occur*, we did not hesitate to make the necessary incisions, for examining the state of the skull. More than two inches in length, and one in breadth, of the left parietal bone was found comminuted, and sunk near an inch into the brain. The cavity formed by the deepest part of the fracture, was filled with protruded brain, the bulk of a walnut, consisting both of the cortical and medullary substance. The trephine was applied, the depressed portion elevated, and the rugged edges of the surrounding bone taken away, the scalp was brought together, and, though there was hernia cerebri, the boy perfectly recovered.

It may be said, had a strict antiphlogistic treatment been pursued in some of the unhappy cases given previously to these just detailed from the moment the injuries were received, the inflammation might have been so moderated, if not altogether prevented, as to have obviated their fatal effects, and, in support of this, the cases of fracture with depression, from Mr. Abernethy, Mr. Latta, and others, which eventually did well without the use of the trephine, may be brought forward—yes; were the use of the trephine, from this day, to be wholly prescribed, and in future, all cases of depressed fracture, from the slightest to the very worst possible, to be submitted to the antiphlogistic treatment only, no doubt, there would in a few years, be many extraordinary cases of recovery to relate, in addition to those already recorded, in support of the practice. But such apparently miraculous recoveries, may, I think, with considerable probability be accounted for, from the favourable operation of adventitious circumstances. There may, for instance, be fractures with the most palpable depression, where the fractured portions may be so readily susceptible of the constant pulsatory motion of the contents of the cranium, as to be thereby speedily raised to their level, without inducing inflammation.

Two cases are mentioned, by Dr. Munro, in his lectures, as communicated to him by a respectable surgeon residing in the vicinity of Edinburgh. The depressions were very considerable, and, in each, the gentleman urged the immediate necessity of applying the trephine. This, however, the friends refused to comply with. The patients, notwithstanding, went on well, and the depressed portions *were soon restored to their proper level*. Or further, though a depressed bone may be unyielding to the elevating force just alluded to, it may possibly present a somewhat convex, or less rugged, and comparatively inoffensive edge, to the dura mater. The patient, at the same time, may be of a phlegmatic habit, and, consequently, less disposed to inflammation, and this also, happening in a young subject, the brain, during a strict antiphlogistic treatment, might readily and safely adapt itself to the depression.

That a general reliance, however, on such circumstances, precarious as they must necessarily be, would frequently expose patients, not only to much danger, but to irretrievable mischief, must be ob-

vious. Saying nothing of the chronic affections of the brain, as epilepsy, &c. which such unelevated depressions may probably give rise to.*

The two following cases, though they eventually did well, without the operation, were, at the time, however, seemingly exposed to much danger.

Case 14. (Mr. Latta's.) A female, of six years, fell from a table; the wound in the scalp, on the left side, over the frontal bone, was pretty large, with an evident depression, for more than half an inch in diameter. The child lay comatose for some hours, and vomited several times. By the next day, she seemed tolerably recovered, and went on well till the *sixteenth*, when she was seized with a chilliness and shivering, which, in a short time, was succeeded by heat and restlessness, attended by a quick and hard pulse. She, however, under a strict antiphlogistic treatment, recovered, and, in a month, the *depressed bone was completely elevated.*†

Case 15. (7th of Mr. Abernethy.) A lad, 18 year of age. In this case, it was impossible to apply the trephine below the fracture, which was situated about a quarter of an inch above the zygoma. The bone was depressed, about the eighth part of an inch. There was no functional disturbance. He went on well till the evening of the second day, when he had become delirious, and could scarcely be kept in bed. His skin was hot, the pulse frequent and strong; he was, therefore, immediately and largely bled. He now became quiet and manageable, but, by the next morning, his answers were incoherent, pulse frequent, his skin hot, and his tongue dry. The bleeding and purging were repeated, and, at night, a blister was applied to his neck. From this time, he gradually became well.

If such cases had been given to show the fractures of the cranium, even with considerable depression, may, in some of the more favourable instances, by vigilant attention and active treatment, do well, without the use of the trephine, where, from the fracture extending into the base of the cranium, or otherwise, the operation might be rendered unsafe or impracticable, they might, no doubt, prove highly useful, by serving to teach us not to despair under such circumstances. But, if they are recorded, whether to establish the inoffensiveness of pressure on these parts—the sufficiency of the resources which the brain has within itself, of removing such irritating pressure, by raising the depressed bone to its level—to set forth the powers of the lancet, and its auxiliaries—to show that the solicitude which Mr. Pott evinces is unnecessary—or, whatever they may be intended to establish or illustrate, with the view of discountenancing the use of the trephine; let us first reflect on the general nature of the depressed fracture—how often

* Vide Dr. Abercrombie's paper on Chronic Inflammation of the Brain.—Edin. Med. & Surg. Journal, 1818.

† Latta's Surgery.

the portion of bone is so impacted as to require considerable force, even by the elevator, to raise it to its level—how utterly inadequate, in such cases, the pulsatory force of the contents of the cranium, to restore the bone to its situation—and, further, how insufficient the lancet, and all the adjutory means with which it may be accompanied, and to whatever length enforced, to prevent the accession, or wholly to arrest the progress of inflammation, in such injuries—I say, let us call to mind these important circumstances, before we implicitly adopt a practice, however highly authorized, which, in many cases, must be fatal, and in all, most hazardous.

The operation of the trephine, when skilfully and cautiously performed, and not under circumstances decidedly unfavourable to its success, as it would undoubtedly be, when had recourse to, as a dernier resort in chronic diseases of the brain, or in crowded hospitals, notorious for the malignity of the air, as was the Hotel Dieu,* for instance, in the time of Desault; has never, that I am aware of, been fairly and positively proved of that dangerous nature, as to warrant the *hazardous practice of leaving a palpably depressed bone unelevated.* Were it so, surely we should hardly expect to find in almost every age, practical surgeons, eminent as well for their long experience, skill, and respectability, as for the public situation which they held, deliberately advising the application of the trepan again and again on the same patient. "If, by making one orifice," says Mr. Sharp, "you cannot raise all the depressed parts, you must make a second, and a third, and continue doing so, till you have reduced the whole cranium even. There is frequently occasion to repeat it twice or thrice, and it has been done twelve times, nay oftener, with success, which," continues Mr. Sharp, "I mention to show the little danger there is, either in sawing the skull, or in exposing the dura mater and brain, when the *pressure* is taken off."†

I practised in a mining district, in the county of Cornwall, for many years, where the labourers, from the nature of their employment, are particularly exposed to injuries of the head. The number of fractures of the cranium which consequently fall to surgeons there, is not, perhaps, exceeded, if equalled any where in the kingdom. My father, for a series of years, had the care of a great number of these miners, and a gentleman, in the same town with myself, was still more extensively engaged. They are both practitioners of long and tried experience. They trephined in all cases of depressed fractures, and their practice has always been decidedly successful.

And further, if Mr. Pott, who, of all others, perhaps, employed the trepan the most frequently, did not think the operation "pain-

* "L'Hotel Dieu no longer deserves to be called a "Store House of Corruption and Disease. A revolution has taken place in the internal administration, as well as in the Surgical Practice of this institution."—*Medical Schools of Paris, by J. Cross, M. R. S. L &c. Vide also Observations on English and French Surgery, by R. J. Roux, page 51.*

† Sharpe's Surgery, page 144.

ful or hazardous," and that too, at a time when it was the practice wholly to remove a portion of the scalp previous to its performance, surely we, in the present day, on availing ourselves of the now well-established practice of preserving the scalp, must think it less so.

It is scarcely necessary to observe here, that Mr. Pott trepanned in every case of depressed fracture—in fissures—and severe contusions of the skull—and this, not only when urgent symptoms of functional disturbance demanded an immediate performance of the operation, but also when no such indications accompanied the injury, solely with the view to *prevent* this consecutive inflammation—effusion—suppuration—caries—and exfoliation of the bone—and separation of the dura mater, with all their mischievous consequences, which he, from very long experience, knew was so liable to succeed to the irritating pressure of broken bone, &c. when suffered to remain unelevated.

"No doubt," says Mr. Pott, "that although my establishing it as a general rule to perforate in all cases, some few would now and then be subject to the operation, who might have done well without it; yet, by the same practice, many a valuable life would be preserved, which must have been lost without it, there being no degree of comparison of the good to be derived from it, when used early as a *preventive*, and what may be expected, if it be deferred till an inflammation, and symptomatic fever make it necessary."

Directly in opposition to this *preventive* practice of Mr. Pott, I am aware the highly influential authority of Mr. Abernethy too, may be quoted, who says,—"Whenever the patient *retains his senses perfectly*, I should think it improper to trephine him, unless *symptoms arose* that indicated the necessity of it"—but let the young and inexperienced surgeon, nevertheless, beware how he passes by the *timely use* of the trephine, in placing an undue reliance on its efficacy when performed on the actual appearance of secondary symptoms of compression. For, in the generality of such cases, it would be found that these symptoms arise from the pressure of matter on the brain, and "this state of things," to use the words of Mr. Samuel Cooper, "cannot come on till after the inflammation of the brain and its membranes has prevailed some time."* It is true, the operation, by giving vent to the confined matter, will sometimes afford temporary relief, and where the previous inflammation may not have been extensive, the patient may also eventually recover, as has been exemplified in the fortunate cases of Mr. O'Halloran. But it must not be concealed that, however justifiable and proper the use of the trephine, where the surgeon is not called till this unhappy period, that by far—far the greater number of such cases terminate fatally.

What permanent advantage can, indeed, be rationally expected from the operation, at a time when the brain is in a great measure destroyed?

The following very interesting case, from the publication of Mr. Cross, already referred to, is so much in point, that I hope my transcribing it will require no apology.

* Surgical Dictionary, page 923, 3rd Edition.

Case 16. "A woman was admitted at L'Hospice de Perfectionment, on the twentieth January, with fracture and depression of the frontal bone. She had scarcely recovered from the concussion attending the injury, but was sensible, and not labouring under any symptoms of compression. Dubois applied the trepan, and raised the depressed portion to its proper level. The wound was dressed daily, with lint and common cerate. On the evening of the 6th of February, this woman, who seemed to have gone on very well since the operation, was attacked with vomiting, followed by fever, and low delirium. She died on the morning of the ninth." Taking this case thus far, certainly it cannot be said to be favourable to the use of the trephine, for the patient died, though the surgeon had recourse to it immediately after the accident—but *mark* the sequel. "Forty hours after death," continues Mr. Cross, "the head was inspected at the public theatre, before the students left the hospital. The fracture of the frontal bone had extended into the orbit—a spicula of bone had pierced the dura mater, and was still remaining "enfoncée dans le cerveau."* There was pus between the hemispheres of the brain, and effused from the injured parts, as far back as the cerebellum, and a portion of the right anterior lobe of the cerebrum, had a gangrenous appearance."

What opinion will the unprejudiced reader now give respecting the cause of the death of this woman? Will he, for a moment, hesitate to lay it to the unelevated portion of broken bone, discovered piercing through the dura mater into the brain itself? Yet the patient continued until the evening of the sixth of Februaary, *seventeen days after the accident*, apparently not only free from danger, but from any unpleasant symptom whatever, when she was suddenly seized with vomiting, followed by fever, and, on the morning of the 9th, little more than two days after the attack, expired. Now, permit me to ask, when could the inflammation, which ended in this extensive diffusion of matter, and gangrenous state of the cerebrum, have commenced? I presume, no one will say on the evening of the 6th of February, the time when she was attacked with vomiting. For what analogy have we that can warrant such an inference? If, then, we give up this point, its commencement must be dated farther back, and that to a period when the patient had no pain, fever, or other symptom to complain of, and was thought in a fair way of recovery. That the inflammation, which ended in so wide a diffusion of pus must, notwithstanding the absence of symptoms, have begun soon after the infliction of the injury, can hardly be questioned. To think otherwise, must be in direct opposition to the plainest facts in surgery. Have, we, for instance, on the one hand, ever seen, heard, or read of the inflammatory, suppurative, and gangrenous stages, *all* running their course in the brain in the short space of two days, from such a cause? Or, if so, on the other, can it be supposed that inflammation was not likely to commence during the first seventeen days after the accident, under the circumstances disclosed in the dissec-

* Sunk deep into the Brain.

tion, when a piece of broken bone was found depressed, actually piercing the dura mater, and sunk deep into the brain, and this too rendered doubly noxious by the constant pulsatory motion of the contents of the cranium against the fractured and unyielding portion? Impossible. Did I want another case further to corroborate those already adduced, to prove that the brain and its membranes may not only be wounded by depressed fragment of bone, but that this fragment may actually remain piercing the parts, without occasioning immediate symptoms of compression—and further, that this shall, by its irritation, give rise to inflammation, suppuration, and gangrene itself, without pain, fever, or other symptoms by which we might apprehend the presence of such an evil, or the commencement or progress of its fatal consequences, surely this of Mr. Cross has supplied me.

The surgeon prejudiced against the operation, had it not been for the *examination after death*, would here have had another case to relate, in proof not only, perhaps, of the inefficacy, but of the positive injury of the trepan.

Is there not considerable probability that many of the fatal cases* recorded, may have been of a similar nature?

It may probably be said that I have insisted too much, throughout this paper, on the pathological obscurity of the brain and its membranes. If I have said much, it is because the non-trephiner has said far—very far too little, on this important practical point. That such pathological obscurity, however, is not observed in all cases, I most readily acknowledge—that the commencement and progress of inflammation of the brain and its membranes are sometimes apparently indicated by a set of corresponding symptoms, all have agreed; and by no one have these symptoms, perhaps, been more accurately given, than by Mr. Pott himself—but, that the certainty of their appearance cannot be relied on, to guide our early treatment, the case of Mr. Cross, just detailed, and the cases Nos. 3, 4, 5, 6, and 7 in this paper, together with the opinions of many of the most experienced surgeons, unquestionably prove.

But, let us suppose that the commencement and progress of inflammation were in all cases clearly and uniformly indicated. Would this enable us to meet the exigency in every case?—By no means. It might, indeed, in some instances, obviate the no inconsiderable inconveniences of exposing the patient to the full use of the lancet, and the whole train of its auxiliaries, unnecessarily—but it could never prevent the putting in practice such depleting measures, in others, unsuccessfully. For no one would presume he could prevent, however highly he may rate the powers of the lancet, inflammation taking place in a part on which an unyielding depressed fragment of bone presses with its rugged edge, saying nothing of such cases in which the depressed fragment remains actually piercing the parts.

From the view, then, which I have taken, thoughout this paper, of the physiological and pathological peculiarities of the brain and its membranes, the mode of practice I should adopt, will

* See Case.

readily be anticipated. With a few exceptions only, and these under peculiar circumstances, especially in young subjects,* I should apply the trephine in every case of fracture of the cranium, with palpable depression, particularly beyond the walls of an hospital, whether *accompanied with symptoms of compression or not.* When accompanied with symptoms of compression, I should perform the operation with *two* intentions; first, to free the brain from the pressure giving rise to such apopletic symptoms, by its acting more or less on the whole of that organ; and, secondly, to remove the *irritating pressure* from the parts on which the depressed bone *actually bears*, for the same obvious reason, that I would remove a foreign body from a wound in any other part of the body.

In cases unaccompanied by such *functional derangement*, ever bearing in mind, that the most *dangerous irritating pressure may exist, notwithstanding the absence of such symptoms*, I should also apply the trephine, with the second intention, namely, as a *preventive.*

I feel thus desirous to direct the attention to the *irritating* pressure which must so frequently take place in depressed fractures, and its often pernicious consequences, when suffered to remain unelevated, since it appears to me to have been wholly *overlooked*, in the practical inculcations so *forcibly and repeatedly laid down* in the "Surgical Dictionary." *That the trephine must not be applied, nor even an examination made, unless such injuries be actually accompanied by pressing and alarming symptoms of compression.* Inculcations, indeed, rendered doubly influential by the highly respectable sources from which they have emanated, and the channels, also through which they have been so widely disseminated amongst, too, the junior, and, consequently, the less experienced part of the profession.

I must not conclude, however, without observing that, it has not been my object, in this paper, to enter fully into the opinions of Mr. Pott, but rather to point out the dangers which, I conceive, are so liable to result from adopting so opposite an extreme of practice, to that laid down by this very eminent and experienced surgeon.

Nor must I forget to add the no less important than conclusive practical remark of Dr. Thomson, late professor of Military Surgery in this University. In closing his valuable and highly interesting lectures on "Injuries of the Head." The Doctor says, "I have collected the opinions of many of the most eminent surgeons on the Continent of Europe, respecting the use of the trephine, not one of whom ever had to *regret having performed the operation, whilst they all had, of their not having performed it.*"

* Such depressions as the following, will be found, for the most part, perhaps, to do well without the operation.

A farmer's daughter, about eight years of age, fell from a horse. I found a watch-glass-like depression, about an inch in diameter. There was no wound of the integuments. She had vomiting and stupor for some hours, but the next day was nearly well. A strict antiphlogistic regimen was enjoined, and no unpleasant effects ensued. About two years after, I saw the child. The depression had remained.

II.

Report of the Physician of the Small Pox and Vaccination Hospital, February 3d, 1825.—PHYSICIAN, DR. GEO. GREGORY.*

OF all the diseases which afflict the human race, the most formidable (whether we consider the extent of its ravages, or the intensity of its virulence,) is, unquestionably, the Small Pox. The Plague rages only in particular countries, and at particular seasons, but the Small Pox spreads its devastations over every region of the habitable globe, indifferent alike to summer heat and winter cold. Placed as your Physician is, at the head of the only charitable Institution existing in the world for the express relief of this dreadful disorder, he considers it in some measure his duty, by an annual communication to the Governors, to direct their attention, and that of the public, to a subject so replete with interest; to impress upon them the melancholy, but important truth, that the Small Pox still continues among us, and that incessant attention alone can prevent a renewal of those scenes of death and misery, which rendered the disease an object of such terror to our ancestors.

TABLE OF ADMISSIONS INTO THE SMALL POX HOSPITAL,
During the Year 1824.

Class	CHARACTERS OF THE DISEASE.	Admissions.	Deaths.	Rate of Mortality per Cent
1	Small Pox in the Unprotected, in its greatest virulence (*Confluent malignant.*)	12	12	100
2	——————, in its second degree of virulence (*Simple confluent.*)	46	27	59
3	——————, in its third degree of virulence (*Coherent.*)	55	14	23
4	——————, in its mild form	35	1	3
	Total in the Unprotected (*Distinct.*)	148	54	36
5	Small Pox of the Confluent, Coherent, and distinct kinds, occurring subsequent to Vaccination (*Modified.*)	45	0	0
6	Small Pox occurring subsequent to Inoculation (*Secondary.*)	2	0	0
7	Eruptive Diseases, not Small Pox	4	0	0
	Total	199	54	27

Table of the Ages of the several Cases admitted in 1824.

Under Seven Years of Age	33	19	57
Between Seven and Fourteen	15	2	13
Adults	151	33	22
Total	199	54	27

Total Vaccinated in the Year 1824.....3,324.

* We deem the following able Report of Dr. Gregory to be too important for private circulation, and therefore, at our own expense, give it a currency that will at once make its utility general throughout the professional world, on both sides of the Atlantic.

A CURSORY glance at the proceedings which have taken place within the walls of the Hospital, during the past year, will point out the circumstances which have led your Physician to this train of reflection, and show, at the same time, the extent of benefit which the public have reaped from the labours of your useful Institution.

1. The annexed Tables, show, in the first place, that the usefulness of your Hospital, and its credit with the public, are in no degree diminished; for, in the last year, one hundred and ninety-five persons labouring under genuine Small Pox, and four having complaints mistaken in the first instance for Small Pox, have partaken of its benefits; and the annual admissions have never (except in one instance) exceeded the number of two hundred since the commencement of the present century.

2. They point out, in the second place, how great is the mortality of natural Small Pox, when it attacks those who are wholly unprotected. Out of one hundred and forty-eight persons admitted into your Hospital under these circumstaaces, fifty-four died, being at the rate of thirty-six per cent. They show, further, that children suffer from this disease in a much greater degree than grown persons; that is to say, in the ratio of fifty-seven to twenty-two. This great mortality among children, compared with that which takes place at a more advanced period of life, is well worthy of the notice of the Governors. It arises, doubtless, from the comparative feebleness of the human constitution in infancy, and its consequent incapacity to resist with equal effect the inroads of this severe disorder; but the fact is chiefly deserving of attention, as proving, that any measure calculated to throw the burthen of the disease upon a period of life better able to oppose it (even though it had no pretensions whatever to the character of a *preventive*) would yet confer the most essential benefit on mankind:—and this leads me to state,

3. In the third place, that these Tables are fitted to show, in a manner the most unequivocal, some of the advantages of Vaccination. From them the Governors will perceive, that forty-five cases of Small Pox subsequent to Vaccination have been admitted during the year 1824, all of which were discharged cured. Yet these exhibited, at their onset, the several degrees of virulence which characterise the Small Pox in its purest form, and in the usual proportion; that is to say, some were confluent, some coherent, some distinct and mild. By a comparison of these cases with those in the Table that immediately precede them, it will be apparent, that, without the protecting influence of Vaccination, thirty-six per cent. (that is, sixteen out of forty-five) would have died. This simple statement appears to your Physician calculated to allay much of that uneasy feeling which the occasional failures of Vaccination excite. It shows, that where Vaccination is incapable of resisting effectually the approaches of Small Pox, it arrests it in its course, and strips it of all its malignity.

Your Physician, however, by no means wishes to rest the merits of Vaccination on this slender and doubtful basis. He is anxious again

to impress upon the Governors his firm conviction, strengthened by the experience of another year, that Vaccination is, in a very large proportion of cases, a complete security against the Small Pox; and that the benefits which the Hospital confers upon the public, by the reception of persons labouring under Small Pox, are enhanced an hundred and a thousand fold by the strenuous exertions which it makes to diffuse that inestimable blessing. It is with great satisfaction that your Physician reports, that 3,324 persons have been vaccinated under his superintendence during the past year, a number exceeding, by 195, that of 1823. The confidence of the public in the vaccine protection is founded, not on the opinion of medical practitioners, but on an extended observation of its utility and safety; and it is highly gratifying, therefore, to find that confidence not only unshaken, but actually on the increase.

Your Physician has availed himself of the opportunities which his office affords of studying minutely the phenomena of Vaccination, and he has directed his inquiries with the view of ascertaining, as far as possible, to what circumstances the occasional failures of Vaccination are owing. He is well convinced, that much yet remains to be discovered in this path of science, but he has seen enough to convince himself, that not a little may be attributed to careless and imperfect Vaccination. It does not seem to have been hitherto well understood, that the human frame is not at all times susceptible of that full and complete beneficial influence which Vaccination is capable of exerting; the consequence of which is, that Vaccination has been often performed in a state of bodily health, which precluded all reasonable hope of deriving benefit from it.

Your Physician is satisfied, that the presence of fever, of diarrhœa, and of inflammation in some internal organ, interferes so materially with the vaccine process, as in many cases to render its protecting powers uncertain, and in some to prevent them altogether. He is convinced that Vaccination has been hitherto viewed too much as a trifling and unimportant operation. Its performance by other hands than those of medical men, is, he believes, nearly, if not altogether done away with. This affords some prospect of a diminution in the number of failures; but he confidently anticipates still further improvement, when medical practitioners attach a due degree of importance to the operation, and practise it only in such circumstances as afford a fair prospect of obtaining the *full effect* which it is fitted to produce.

Your Physician, in particular, would offer a caution against submitting a child to the process of Vaccination during the period of dentition; and he is further anxious to impress upon those who are engaged in Vaccinating, the necessity of *preparing* the body, in many instances, for its reception; and of keeping the system, during the progress of the disease, free from inflammatory tendency, in the manner formerly practised in regard to Variolous Inoculation. It is quite obvious, that an operation, which is to free the constitution from the influence of a poison so active and subtle as that of Small Pox, should be conducted with, at least the same degree of attention which was bestowed upon the attempt to introduce it into the system.

Your Physician has thus endeavoured to strike, with a fair and impartial hand, the balance of the defects and benefits of Vaccination. The hope entertained by its illustrious and amiable discoverer, that it might ultimately exterminate Small Pox from off the face of the earth, appears vain and unfounded. The decree of Providence seems to be, that Small Pox shall never cease out of the land. In His mercy he has been graciously pleased greatly to lessen the sphere of it virulence, and to mitigate the intensity of its horrors, but it still exists, and, as far as human eye can penetrate, will for ever continue to exist, one of the many diseases by which mankind is chastised.

With these remarks, your Physician concludes his present Report. The Governors will perceive that he has not shrunk from the investigation of that part of the subject which offered the greatest difficulties, nor hesitated to throw out the suggestions which the limited experience of a few years has dictated to him. He is well aware that these are imperfect. A quarter of a century only has elapsed since the first discovery of Vaccination; and this period is not sufficient to enable us to see fully, and to appreciate justly, the bearings of the many intricate questions connected with Vaccination. He can only assure the Governors, however, of his anxious wish to improve the opportunities which their patronage affords; and, to the utmost of his power, to render the Small Pox Hospital useful to the public at large, as well as to the miserable victims of that dreadful disorder.

GEORGE GREGORY, M.D.

8, Upper John-street, Golden-square,
February 3, 1825.

HOSPITAL FOR THE CASUAL SMALL POX AND FOR VACCINATION, SAINT PANCRAS.

Committee, February 3, 1825.

PRESENT,

FLORANCE THOS. YOUNG, Esq., Chairman,
&c. &c. &c.

RESOLVED,—That the Thanks of this Committee are justly due to Dr. GEORGE GREGORY, for his very skilful, comprehensive, and well-digested Report, now read, and for his assiduous attention to the subjects of Small Pox and Vaccination which it evinces—and which are now most important, not only to the practice of this Hospital, but also to the welfare of the public in general.

ORDERED,—That the Secretary be desired to transmit a fair Copy thereof to His Royal Highness the DUKE OF YORK, President; and then to cause the same to be printed, and circulated to all the Governors; and afterwards to be distributed at the Hospital.

[Extracted from the Minutes.]

A. HIGHMORE, *Secretary.*

III.

Sand Rock Spring Cottage,
Isle of Wight, February 7th, 1825.

SIR,

It having been suggested to me, by some highly respectable medical gentlemen of my acquaintance, that it would be very desirable to obtain the ingredients which enter into the composition of the Aluminous Chalybeate Water, from the Sand Rock Spring in this Island, in a concentrated state; I beg leave to inform you, I have accordingly procured a quantity of the residual Salt, by a slow and careful evaporation of the Water, in a water bath, which from experience, I am enabled to say possesses all the medicinal properties of the Water itself, the chief ingredients of which, being the Sulphates of Iron and Alumine, cannot possibly suffer any decomposition from the low degree of temperature at which the process is conducted.

The dose in which I have usually exhibited this Salt, is about six grains (which is nearly equivalent to an ounce of the Water in its natural state) joined with some Bitter Vegetable Extract, and this I have repeated three or four times a day with the occasional addition of a few grains of the Pill ex Aloe c^m^ Myrrh, as the state of the bowels may require. This form, I have found particularly advantageous in those cases in which the use of the Water itself is either inconvenient or inadmissible. I shall, therefore, feel myself extremely obliged by your giving this a place in your recollection, and when an opportunity offers, that you would prescribe it in such cases as may require the aid of so powerful a tonic,

I further take leave to inform you that in consequence of the very beneficial effects of the Waters, and the great resort of persons to the Spring, several most comfortable Lodging Houses have been erected in its vicinity, for the accomodation of those patients who may prefer taking the Water from its source, and which being situated in the most romantic part of the Undercliff in a climate particularly salubrious, cannot fail to prove of service in those cases in which the administration of the Water is indicated.

I beg to apologise for thus intruding myself on your attention, and

Have the honour to remain, Sir,

Your most obedient humble Servant,

T. L. WATERWORTH.

IV.

CROWN LIFE ASSURANCE COMPANY.

CAPITAL £1,500,000.

IN 30,000 SHARES OF £50 EACH.

Directors.—WILLIAM PEATT LITT, Esq. Chairman—JOHN WELLS, Esq. M. P. Deputy-Chairman.—William R. Cosway, Esq.—James Colquhoun, Esq.—James Colvin, Esq.—Captain J. W. D. Dundas, R. N.—James Farquhar, Esq. M. P.—Thomas Harrison, Esq.—George Hooper, Esq.—John Kirkland, Esq.—Major Moody, *Royal Engineers.*—Sir Francis Ommaney, M. P.—Thomas Solly, Esq.—Alexander Stewart, Esq.—William Whitmore, Jun. Esq.—John Wilson, Esq.—William Wilson, Esq.

Auditors.—John Joseph Harrison, Esq.—Isaac Solly, Jun. Esq.—Henry Stock, Esq.

Trustees.—John Wells, Esq. P. M.—James Farquhar, Esq. M. P.—Sir Francis Ommaney, M. P.—George Henry Hooper, Esq.—Alexander Stewart, Esq.

Bankers.—Messrs. Whitmore, Wells, and Whitmore, Lombard-street.

Standing Council.—Charles Ellis, Esq.

Physician.—Dr. James Johnson, Physician Extraordinary to H. R. H. the Duke of Clarence, Suffolk-place.

Surgeon.—James Wardrop, Esq. F. R. S. Ed. and Surgeon Extraordinary to the King, Charles-street, St. James's.

Solicitor.—Thomas Haddan, Esq.—*Actuary.*—Mr. J. M. Rainbow.

Secretary.—Mr. T. G. Conyers.

The distinguishing feature of this Institution is the extension of the advantages of the system of Life Assurance to classes of individuals who are at present altogether excluded from them, except at premiums quite disproportionate to the actual risk.

It is also intended to combine the ordinary business of Life Assurance upon principles which are the result of the experience of the existing Establishments, and which, whilst they afford adequate security to the Company, will, at the same time, be found to present important advantages to the public.

It is well known that the Officers in his Majesty's Army, Navy and Royal Marines, and in the Military and Maritime Service of the Honourable the East-India Company, are altogether deprived of the benefit of Life Assurance during the periods of actual service, except at exorbitant premiums, and that under any circumstances differing from the ordinary risks they experience considerable difficulty in effecting insurances.

The Officers employed in the Merchant Service, a very numerous and respectable class of men, labour under similar disadvantages.

With a view to remove these obstacles, considerable pains have been taken to collect the requisite data for calculating a scale of premiums proportionate to the additional risks arising from actual service, and from sea and climate, and it is satisfactory to state that the lives of gentlemen engaged in the professions before mentioned may be insured at moderate and corresponding rates.

The present Company has therefore been established, having for its objects the ordinary business of Life Insurance, the Insurance of the Lives of Officers in His Majesty's Army, Navy, and Royal Marines, (both at home and *upon actual service*,) in the Military and Maritime Service of the Honourable the East-India Company, and in the Merchant Service of the United Kingdom, and the insurance of the lives of individuals intending to reside abroad, either permanently or for shorter periods, and *of persons proceeding upon single voyages to any quarter of the globe, or remaining at sea*, at premiums proportionate to the actual risk, and calculated upon unquestionable and ascertained data.

This Company will also grant Life Annuities, present and deferred, and Endowments for Children, purchase Life and Reversionary Interests, advance money on Mortgage, or other security, and transact generally all business appertaining to a Life Insurance Company.

Experience having shown the policy of compelling Shareholders to effect Insurances, Shareholders in this Company will be required to insure, or procure and keep on foot Insurances, to the amount of one-half of their Shares, to purchase or sell an Annuity, the consideration for which shall be equal to that amount, or to pay an annual fine of *2s. 6d.* per share upon such Moiety.

Persons assured for the whole term of Life will be entitled to participate in the profits, in the proportion of two-thirds to the Assured, and of one-third to the Proprietors, in such manner and under such regulations as shall be determined by the Deed of Settlement. Parties so entitled to participate will also have an option to have their Premiums reduced, or a bonus added to their Capital, according to the amount of profits.

It is also a fundamental principle of the Company, that no Proprietor is to be answerable for any claims or demands against the Company beyond the amount of his Share in the subscribed Capital, and that the Funds of the Company alone shall be answerable to the Insured.

In carrying the extensive views of this Society into effect it will be the object of the Directors to afford to the different classes of Insurers all those facilities which the peculiar nature of their risks may require; and, upon all occasions, consistently with the security of the Society, to promote the wishes of the different parties insured.

The Deed of Settlement will be prepared under the advice of eminent Counsel, and the Shareholders will be required to sign such a Deed as may be so prepared, and shall receive the sanction of the Directors, with whom alone the regulations and details of the Company are to rest.

The Capital will be raised in 30,000 Shares, of £50 each, and the Shareholders will be required (for the purpose of forming a precautionary fund) to pay a deposit of £5 per share into the hands of the Bankers, at such time as may be appointed by the Directors.

A reserve of Shares has been made for the Officers in His Majesty's Army and Navy, and Royal Marines, and in the East-India Company's and Merchant Service, and for the Outports.

All communications to be addressed to the Chairman of the Company, and left at the Office of Messrs. GATTY, HADDAN, GATTY, and HADDAN, Angel-court, Throgmorton-street, where Prospectuses may be obtained.

V.

Report of the Committee of the Westminster Medical Society, to the Annual General Meeting, February 12th, 1825.

THE Committee of the Westminster Medical Society, on producing their Annual Report, cannot but congratulate the Members on its present highly flourishing condition. The alterations in the plan of the Society, proposed at the beginning of this session, and which, after full deliberation and discussion, at not less than three special meetings were agreed to by a majority of the Members, have now been in operation for four months, and the Committee beg to call the attention of the Society to the result.

The Committee have the satisfaction of stating, that the attendance of Members on the nights of assembling, has been uniformly larger than in any other session since the foundation of the Society. In the last session particularly (not to mention the previous ones,) it could not have escaped notice, that, although the system of fines for non-attendance was in operation, frequently at the beginning of the evening, not more than five or six Members made their appearance, and they rarely increased beyond eighteen or twenty during the meeting; whereas, since the present plan has been adopted, the number of Members has even exceeded eighty, and has been never less than sixty. This gratifying circumstance the Committee must consider to be partly owing to the greater interest taken in the debates, as now regulated, and partly, perhaps, to the more independent condition of the Society, (as the law to abolish the fines levied on the ordinary Members for non-attendance was passed on November the 27th.)

The admission of new Members has also been more numerous than in any former session. During the last, the number only amounted to twelve; already there have been fifty-two new Members elected in the present session, (although there still remains upwards of two months before its termination) of these, four have been elected Honorary Members: and the Committee remark with pleasure, that the number of practitioners, who have been admitted in the rank of Resident Members, has been much larger than the usual proportion, many of whom have shown their interest in the welfare of the Society, by taking an active part in the debates.

Since the new regulations respecting the papers and subjects brought forwards for discussion, the Committee beg to draw the attention of the Society to the spirited manner with which the debates have been conducted, and to the interest and importance of the questions.

The Committee feel confident that the exertions of the Members will not fall off, but that they will consider, that they are contributing most essentially to the welfare of the Society, by coming forward with proposals to the Committee of subjects for discussion.

The Committee have used their utmost endeavours to find a room for the Meetings of the Society, according to the resolution passed at the General Meeting, October 23rd; but regret that they have hitherto been unsuccessful; as, though they have inspected several, they have been less eligible than the present place of meeting.

The Committee have taken into their consideration the alterations in the Code of Laws, rendered necessary by the improved condition of the Society. These alterations will very shortly be read from the chair; and will be afterwards printed for the use of the Members. The Committee trust also, by

the end of the present session to be able to publish a complete list of the Members of the Society.

By the report of the Treasurer, it will be observed, that the finances of the Society are very much improved; and although the receipts, including the fines, last session, were considerably less than the expenses, the Committee have the satisfaction to state that, in the present session, the receipts will have so far exceeded the ordinary expenditure, that they believe it will be in their power to add their funded capital.

Before closing their Report, the Committee would draw the attention of the Members to a proposal for extending the utility, and adding to the permanent respectability of the Society, which has met the decided approbation of all the Members who have considered the subject, including many of its oldest supporters. It is suggested, that when any eligible set of rooms can be procured, they shall be taken for the sole use of the Society; and during the week, shall be opened as reading-rooms for the Members at certain hours of the day: for which purpose, the most useful periodical Medical Journals might be taken in, and a library gradually collected. In furtherance of this project, promises have been already received of donations of books, and of subscriptions to cover the first expenses of the necessary furniture, &c. But as the annual expenses will be then very considerably increased, it is further proposed to call a General Meeting on the first Saturday in April, to consider of the propriety of calling upon the Resident and Honorary Members) who constitute the majority of those attending the Meetings, and likely to receive most benefit from the projected change) to pay an annual subscription of one guinea each, in addition to their entrance. And as this regulation cannot well be retrospective, and yet the subscriptions, from the average numbers of new Members each year, will not amount to a sufficient sum at first, it is hoped that many who are already Members, will voluntarily subscribe, annually, the sum mentioned, by which the Society will at once be enabled to commence the above projected plan.

For this purpose it is recommended that a book be opened, in which those who are favourable to the system, may enter their names;—with the amount, in one list, of their intended donation towards the first expenses of the furniture and library—and in another list, as purposing to become annual subscribers. By this method, the Society, upon meeting with suitable rooms, will at once be able to negotiate for them, and can then call upon Members for the sums, or portions of the sums, for which they have pledged themselves.

Resolutions to this effect will be proposed for the consideration of the present meeting.

(*Signed*) HENRY HUTCHINS, } *Secretaries.*
12*th Feb.* 1825. JOS. WRENTMORE, }

☞ *Meetings every Saturday night from* 8 *till* 10 *o'clock, at No.* 51, *Great Marlborough Street.*

We are glad to see that Mr. Lizars, surgeon, author of the System of Anatomical Plates, has announced an account of his successful operations for the removal of enlarged ovaria from the female abdomen. In one of these cases, the abdominal cavity, from the sternum to the os pubis, was laid open and an ovarium extracted, which measures 11 inches long by $7\frac{1}{2}$ inches broad, and weighs upwards of 5 lb.

IV.

To the Editor of the Medico Chirurgical Review.

SIR,—I believe it has been for some time a desideratum to obtain an instrument capable of extracting teeth perpendicularly, and at the same time simple and easy in its construction and application. I should feel much obliged by your inserting the following description of one which I conceive will answer these intents. I was not aware that any thing of the kind had been before attempted, and was rather surprised to find at the instrument-maker's one, which though very antiquated in its appearance (having been made 50 years ago) was yet somewhat similar in principle, but from the bulk and complexity of its structure, could be of no practical utility.

Description. A pair of forceps made tolerably strong and very similar to what are called Cartwright's, but with the handles longer, and the beak turned perpendicularly downwards. A groove extends along the under surface of the instrument between the two points where the blades and handles begin to diverge, in which is to be placed a leg, of about a quarter of an inch in *length* (capable of sliding backwards and forwards as occasion may require,) with its lower end formed into a small, round nob, which is received into, and nearly enclosed by a cup, thus constituting a complete ball and socket joint. This cup is affixed to a small plate of iron, about the breadth of a nidlar tooth turned down a little at the sides, lined with elastic gum, and forming as it were, a kind of cap for the teeth.

The mode of its application is obvious. The cap is to be placed on the tooth immediately in front of the one intended to be removed; after taking a firm hold, depress the handle of the instrument, giving it at the same time a little lateral motion, and should there be a vacancy in front of the decayed tooth, the cap must be removed on to the one next in succession.

The above description is probably very unintelligible, but should any one wish to be better informed, he may satisfy himself by calling at Evans and Co's, No. 10, Old Change, St. Paul's. I have only to add that the instrument has been used several times in St. Bartholomew's Hospital, and very satisfactorily so.

I am, Sir,
Your obedient servant,
JOHN REEVE.

St. Bartholomew's Hospital,
March 10th.

VII.

To Dr. James Johnson.

Dear Sir,

In reply to the inquiries you have made, as to the duty of the Coroner, in regard to opening the bodies of those who have died under suspicious or mysterious circumstances, I have, upon the spur of the occasion, thrown together a few observations which may, perhaps, be of some use, although less digested than, with longer time, I might have been able to present them.

I am not aware that, in point of *law*, it is imperative upon the Coroner to have the body opened. Since my attention has been more particularly directed to medico-legal inquiries, it has been my persuasion that this office stands in much need of reformation; nor am I singular in the opinion that the interests of justice would be promoted, were it confided, generally, to medical men rather than to attornies, as is the prevalent custom. This is the opinion of many judicious individuals, both in the magistracy and of general acquirements, with regard to public economy.

I am not sorry for the opportunity, now afforded me, of adding an observation to what I have said on the burdens of the profession in my recently published volume on Medical Evidence.* Practitioners are much in the habit of complaining about the great trouble and inconvenience they suffer by frequent attendance on inquests. The Coroner, it is true, can compel personal attendance to give evidence; but I am grievously mistaken if he can require the opening of a body, by virtue of his office. In the majority of cases, the surgeon, upon whom this sort of duty devolves, is employed and paid by the parish; and, in taking the situation of parish surgeon, I look upon it that he enters into a contract to perform such labour as that in question. At the same time I believe that, when so employed, it is customary to grant extra remuneration. When the surgeon is not in that situation, and is required to perform the operation of opening a body, I think he has a right to stipulate for adequate recompense.

Having stated this view of the subject, I would add, that a Coroner can have no right *to prevent* the opening of a body, where, in the opinion of competent judges, (that is, of medical men,) it is necessary. If a medical witness declare that he cannot ascertain the cause of death without having recourse to that process, I do not see how the Jury can discharge their consciences without it; and if that or any other species of information be necessary for their satisfaction, the Coroner would be most singularly mistaken in his ideas of duty, did he interfere to prevent it.

* Analysis of Medical Evidence, &c. Chapter ii.

The Jury are sworn "diligently to inquire, and true presentment make *how, and in what manner*" the deceased came to his death, &c.* A Coroner cannot act but upon view of the body; and this view must also be taken by the Jury—upon which, and upon the evidence of the witnesses, their verdict is to be formed.

The statute *de officio Coronatoris*, (as old as the year 1275,) prescribes the *visus coporis;* which, although now a mere form, essential to holding the inquest, was certainly ordained, in the first instance, from a notion that it would enable the Coroner's Court to ascertain the cause of death; for, if we look at some expressions in the statute, we can form no other conclusion than that such was in reality the case.—"It is to be inquired of them that be drowned, or suddenly dead, and after such bodies are to be seen, whether they were so drowned, or slain, or strangled by the sign of a cord tied straight about their necks, or about any of their members, or upon any other hurt found upon their bodies, &c." "Also all wounds ought to be viewed, the length, breadth, and deepness, and with what weapons, and in what part of the body the wound or hurt is, &c." The spirit of these passages evidently favours, if it does not indeed enjoin dissection—for how are we to tell whether a body has been drowned, or ascertain the extent of many—of most mortal wounds, without examination of the internal parts? Mr. Serjeant Hawkins, from whose work I quote these passages,† says further—"if a Coroner take an inquest after a body hath been so long buried that it may be reasonably presumed that the view of it could be of no manner of use to the Jurors, &c." All this is singularly precise if we look at the practice even of medical men down to a recent period: for they themselves were accustomed to set great importance on the external aspect of the body in such cases, and the now indispensable duty of examining the internal parts is almost of late introduction.

But the Jury is sworn to decide, also, upon the evidence of the witnesses; and these are again to declare the truth, the whole truth, and nothing but the truth. Now, when a medical man is summoned before the Coroner it is in the capacity of a witness, not in any official connexion with the Court. He comes under this obligation; and, let me ask, what medical man, of common probity and ordinary professional acquirements, could pronounce upon the cause of death without discovering it? How can he declare the whole truth if not acquainted with the whole of the matter that imparts that truth? How can he be clear in his own mind that he may not say something which is *not the truth*, if not persuaded as to the nature of the circumstances that constitute the truth of the matter?

The Coroner is certainly bound to encourage, and (if he cannot order) to procure the opening of bodies in all cases requiring medical evidence. If a *superficial* view of a body will do, any Juryman may know as much of the matter as a medical man; but if the aid

* Burn's Justice. † Pleas of the Crown.

of the latter be necessary, it must be in order to instruct the Court; and the Court cannot direct him in what way they are to be instructed. It is a rule with regard to evidence, that the best is to be procured;* and the Coroner is bound to receive all the evidence produced by either party. Now it may so happen that, if the one party chooses to forego the process of dissection, the other may insist upon it—and the course for the Coroner to pursue in such a case is laid down.

It was not long since ruled in the Court of King's Bench,† that the Coroner is to direct the Jury in point of law, and to explain to them the distinction between murder and manslaughter. Of course it must be his duty to ascertain whether there be grounds for an accusation of either; and if the medical witnesses are not permitted to seek for evidence of violence, an unlawful impediment is thrown in the way of justice; and the Coroner is liable to heavy penalties, as well as loss of office for neglect of his duty. On this point, I shall take the liberty of referring to the case of the woman who died from the bursting of an abscess in the liver, during an altercation with her husband.‡

Juries have fully as little acquaintance with the medical, as they have with the legal, bearings of matters that come before them; and are often disposed to express themselves satisfied, while yet totally uninformed about them. It would sound strange even to the Coroner, did they dispense with his information about the *law* of their duty, but he often acquiesces in their statement of satisfaction with the *science* of it. If his object be not merely to earn his fees, he will not refer the merits of the case to their decision until these merits have been laid before them in the fullest manner possible. How, otherwise, can their opinion be sworn to as a *vere dictum?* Much in all cases will depend on the Coroner's discretion, and on the intelligence of Juries—but there is much also dependent on the medical witness. If medical men were not, in general, so inept for the discharge of their forensic duties, we should see a very different course pursued on many inquests.

Such statements as the foregoing do not require much legal investigation, and are, perhaps, not less entitled to the attention of the medical profession, that they are not communicated by a lawyer. The sources whence they are derived are open to every one, and familiar to many who have no connexion with juridical pursuits. The inferences I have ventured to draw must be obvious to every one, in the habit of reasoning.

I remain, yours truly,
J. G. SMITH.

March 12, 1825.

* Phillips on the Law of Evidence, ch. vii. sect. 6.

† By Mr. Justice Bailey, on the application for a mandamus, that arose out of the notorious Oldham Inquest, in 1819.

‡ Principles of Forensic Medicine. The case has been repeatedly referred to by subsequent writers as an important illustration.

XVI.

INTELLIGENCE, CORRESPONDENCE, &c.

A General Infirmary, or rather an Hospital, is about to be erected in Chichester, on a large scale, and chiefly, we believe, through the active exertions of that able physician, Dr. John Forbes, now so favourably known to the profession. We have the Prospectus before us, and the Resolutions agreed to at a Meeting held on the 29th December last, His Grace the Duke of Richmond in the chair. We were gratified to see the following resolution among others:—"Resolved, that the thanks of this meeting be given to Dr. Forbes, for the zeal he has shown in endeavouring to promote the desirable object for which this meeting is assembled; and for his exertions in procuring statements and plans of nearly every hospital in England." Sincerely do we wish success to the undertaking, and confidently do we anticipate an accession of valuable information for the profession at large, from the field which this institution will open for the talents of the physician above-mentioned.

Factitious Mineral Waters at Brighton.

In a late number, we noticed the new Institution at Brighton, under the direction of the celebrated Dr. Struve, of Dresden, for the preparation of factitious Mineral Waters of repute on the continent. We are happy in affording some farther information relative to this undertaking, in the present quarter.

At the Institution, all preparations are now brought to a conclusion; but as Dr. Struve, who considers it incumbent on him to be present at the opening, cannot be in England before the middle of next month, the opening is finally fixed for the *first of May*.

The Pump-Room, upon which no expense has been spared, is situatedat the back of the East Cliff, in a valley, formerly composing part of the Downs, but which, from its sheltered position, was converted into pleasure grounds, which have been laid out with great taste, and bid fair to become a favourite promenade with genteel company. The liveliness of the scene will undoubtedly be no less favourable than the security from the south west winds, or the use of mineral waters.

The waters which will be found at the Pump-Room this year will be the following, viz; *Warm Waters*—The Sprudel, Neubrunnen, Mühlbrunnen, and Theresienbrunnen of Carlsbad: the Krœncheu and Kesselbrunnen of Ems. *Cold Waters*—The Kreutzbrunnen and Ferdinandsbrunnen of Marienbad and Auschowitz: the Franzensbrunnen of Eger: the Pouhon of Spa: the Pyrmont and Seltzer Waters.

Some of the Factitious Mineral Waters of Carlsbad have lately been analysed by Mr. Faraday of the Royal Institution. He will shortly publish a report of the results which are uncommonly favourable.

Literary Notice.

Dr. Gordon Smith is preparing a Systematic Work on Medical Police.

The communication from Mr. COLVAN is received, and will be properly disposed of.

Mr. JESTON's Analysis of Opium came just in time to be acknowledged in this sheet.

The "Hypocritical Petition" from the medical men of Bath, against "Cruelty to Animals," is received.

☞ We consider it a disgrace to the Profession to address the Senate or the Public on any such subjects. It is downright hypocrisy, and we shall not fail to stigmatize it as such.

Mr. BATTLEY has pursued his Analysis of the Constituents of Opium to a considerable extent, but the intricacy of the subject will not allow him to lay the results before the Professional Public, before the next, or a succeeding No. of this Journal.

N. B. Early in May, Mr. BATTLEY means to throw open his Specimens of Materia Medica, his Pharmaceutical Preparations, and his Laboratory in general, for the inspection of the Professional Public.

Sand Rock Spring, Isle of Wight.

Mr. DUNCOMBE, 199, Fleet Street, is appointed Agent for the sale of the residual Salts and Waters alluded to at page 555 of this Number.

OBITUARY.

Lately died, at his residence, in Sloane Street, Dr. Chisholm, a most meritorious Physician, whose writings are well known to every member of the profession. He fell a victim to disease of the prostate gland, for which he had the able advice and constant assistance of his friend, Mr. Brodie.

Dr. C. went to Amercia, as Surgeon of a Highland Regiment, in the year 1774, in which regiment, the since celebrated Dr. Jackson was then assistant surgeon. For some reason unknown to us, Dr. Chisholm left that line of the Army, and went into the Artillery, in the year 1782. In 1794, he obtained the appointment of Inspector-General of Ordnance Hospitals in the West Indies, and, about that period, we believe, published the first edition of his Work on the Fever of Grenada. His writings and controversies respecting the Bulam fever, are well known, and although Dr. Bancroft was supposed to have the better of the controversy at the time, yet many subsequent and recent events have tended to strengthen the opinions of Dr. Chisholm, and weaken the arguments of his opponent. His papers in the Edinburgh Journal, especially those on fish-poison, the dracunculus, &c. have all proved the author to be a man of science, accurate observation, ingenuity, and professional zeal. During his residence as a physician at Clifton, we have reason to believe he was highly respected by his brethren, and confided in by the public at large. A few years ago, Dr. Chisholm gave up the duties of his profession, and travelled and sojourned in France, Switzerland, and Italy, for the sake of his children's education, and his own health. He returned to this country about a year ago, and we had hopes that he would have enjoyed the "age of ease," after "a youth of labour;" but fate ordained it otherwise! We met him only a few months ago, at a public medical dinner, and he seemed in the possession of very good health and spirits—we conclude, therefore, that some acute inflammation must have supervened on a chronic disease, which is seldom suddenly fatal. To sum up his character in three words—he was an able physician—a man of probity—an affectionate husband and parent. Who would desire a better epitaph?

Additional Subscribers since last Quarter.

A.

Allen, Dr. Epping Forest Asylum, Leopard's-Hill Lodge, Loughton, Essex.

Andrews, Mr. W. S. Surgeon, Richmond.

Anstice,—Esq. St. John's Wood Road.

B.

Blest, Dr. William C. Member of the Medical Society of Trinity College, Dublin, of the Medico-Chirurgical Society of Edinburgh, &c. Santiago, Chili.

Burnett, Dr. William, Member of the Royal College of Physicians of London, Medical Commissioner of His Majesty's Navy, &c. Welbeck Street, Cavendish Square.

C.

Cave, Thomas, Esq. Surgeon, Salisbury.

Coates, Amos, Esq. Surgeon, York.

Corban, Francis, M. D. Member of the Royal College of Surgeons of London, Glandore Dispensary, County of Cork.

D.

De La Hooke, Wm. Esq. Plympton, Devon.

Dimond, Mr. W. B. Weston House, Weston Street, St. Pancras.

E.

Elsegood, Mr. Upper Brook Street.

G.

Granville, Dr. Augustus, B. &c. Grafton-st. Berkeley Square.

Gullan, Mr. Hon. East India Company's Service, George Street, Euston Square.

H.

Hardman. Dr.

I.

Ingram, Mr. James, Buenos Ayres.

L.

Lomas, Mr. Thomas, Surgeon, Belper, Derbyshire.

Lucas, Mr. Surgeon, &c. Charles Street, Soho.

M.

M'Morris, Joseph, Esq. Superintendant of Vaccination, Guzerat District, Bombay Establishment.

M'Morris, John, Esq. Assistant-Surgeon, H. M. 4th Regiment of Cavalry, at Kaira, Bombay Establishment.

Martin, Mr. Robert, Surgeon, Holbrook, near Ipswich.

Morrah, Mr. Surg. Sloane St.

Muriel, Mr. Borough.

N.

Nursaw, Mr. Thomas, Student.

P.

Pavy, Mr. Woodstock.

R.

Rea, Dr.

Rodolph, Francis, Esq. Rio Janiero.

S.

Shaw, Mr. Surgeon, Aston, Cumberland.

Sluder, Mr. Charles, Student.

Spry, J. H. Esq. Charter House Square.

W.

Warren, Mr. Charles, Surgeon, to Chili.

Warwick, Mr. J. B. Southwell, Notts.

Watson, D. Bernard Street, Russell Square.

Watson, Mr. John, Surgeon, Beomopfield, Durham.

Wilson, Mr. Robert, to Callao, South America.

Woolaston, Mr. Surg. Clapham.

☞ Mr. Brande's Manual of Pharmacy was received too late for insertion in the Bibliographical Record.

INDEX.

Abortion, Dr. Musgrave's case of. 513
Abortion, culpable instance of ... 528
Abscess in the stomach 180
Abuse of purgatives in piles..... 289
Acetate of morphine in rheumatism..... 531
Acid (lactic) in the human stomach 145
Acne, Mr. Plumbe on..... 46
Air, fatal introduction of, by a vein 218
Alimentary canal, perforations of 170
Alison, Dr. on scrofula..... 98
Amesbury, Mr. on non-union of fractures..... 249
Amputation of the lower jaw.... 210
Amputation (successful) at the hip joint 225
Analecta, or little periscope..... 248
Analecta Minora..... 530
Anatomy of the skin 30
Angina pectoris, Dr. Hosack on.. 59
Angular projection of the spine.. 141
Animal putrefaction, fatal instance of..... 202
Anomalous gout, M. Bayle..... 187
Antimonium tartarizatum, remarks on 357
Apoplexy, tendency of puerperal women to 517
Arnott, Mr. on ptyalism..... 153
Ascension, fatal fever at 5
Ascites, treated by compression . 530
Ascites and pregnancy combined. 506
Asthma, fatal from affection of glottis..... 458
Auscultation, Laennec and Forbes on 61
Avenbrugger on percussion..... 65
Balfour, Dr. on Hernia 212
Balfour, Dr. his striking cures ... 234
Bampfield, Mr. on the spine 112
Banu, fever in..... 1
Basis Cranii, imagined fracture of 466
Bedford man of war, fever in ... 10
Belcher, Dr. William, on enlarged tonsils..... 317
Biliary calculus, Dr. Craigie on.. 159
Bladder opened by Mr. A. C. Hutchison 224
Blundell, Dr. his physiological researches..... 400
Borate of potassa, Dr. Hamilton's catholicon..... 515
Bourdon, M. on organic disease of stomach..... 174
Boyle, Mr. on Moxa 377
Bronchocele, iodine in 229
Brook, Dr. on liver cough..... 208
Buchu leaves, in diseases of the bladder.. 485
Burnett, Dr. on fever..... 1
Byron, Lord—dissection of 164
Cæsarean section, substitute for.. 522
Calculus, biliary, a large one passed 159
Callow, surgeon, on abscess of the stomach..... 180
Calvert, Mr. on hæmorrhoids ... 273
Cancer, correction of its fetor... 249
Carmichael, Mr. on Tetanus 193
Carswell, Mr. on melanosis 154
Carter, Dr. on occult disease of the chest 161
Case of supposed disease of the heart..... 461
Castor oil, substitute for 249
Cayol, M. his views of fever 463
Cellular texture, inflammation of 335
Cerebral affection 192
Chronic diseases, percussion in.. 70
Chronic enlargement of the tonsils 217
Circulating function, Dr. Uwins's ideas of..... 385
Classification of cutaneous diseases 45
Cleverly, Dr. his death..... 256
Colchicum in rheumatism..... 430
Colon, cases of accumulations in the 489
Compendium of medical practice 382
Compression, its effect in ascites 500
Congestive fever in the sea..... 240
Contagion, definition of 389
Contagious glanders, cure of..... 249
Contraction of the anus 283
Conversion of disease, Dr. Crampton 197
Convulsions peculiar to children. 493
Cooke, the tragedian, dissection of 61
Corvisart, on percussion..... 65
Crampton, Dr. on conversion of disease..... 197
Crampton, Dr. on opium poisoning 235
Crown Assurance Company, prospectus of 556
Cubebs, volatile oil of..... 532
Cullen, Mr. on melanosis 154
Curvatures of the spine, essay on 112
Cutaneous diseases, works on.... 29
Cuticle, anatomy and functions of 30
Cynanche trachealis..... 181
Dangers of iodine 233
Datura stramonium in nervous complaints..... 491
Dawson's, Dr. practice of physic 382
Death, sudden, in an operation.. 218
Delpech's amputation at the hip-joint 225
Diabetes, Dr. Sharkey on..... 237
Diffuse inflammation, Dr. Duncan on 335
Discharge, hæmorrhoidal, nature of 274
Distortions of the spine, Mr. Bampfield on 112
Dropsy in pregnancy, curious case of..... 523
Drug, Dr. on the etiology of goitre 442

Duncan, Dr. on phlebitis 161
Duncan, Dr. on diffuse inflammation 335
Dupuytren, operations by 219
Dysentery, Dr. O'Halloran's treatment of 234
Dysentery, employment of tobacco in 495
Dyspnœa, fatal cases of 444
Emetics, their efficacy in hæmatemesis 481
Emplasto-dermic treatment of diseases 248
Epilepsy, on the pathology of ... 205
Epilepsy, tartar emetic ointment in 486
Etiology of cutaneous diseases .. 42
Etiology of scrofula 98
Etiology of hæmorrhoids 285
Etiology of goitre 442
Excurvation of the spine 114
Expectoration in phthisis, acid and alkaline 452
Extinction of fire, recipe for 530
Extirpation of the ovaria 215
Extract of lettuce, a substitute for opium 531
Extra limites 536
Extravasations in the chest 71
Eye, its indications in disease ... 425
Fever, eclectic article on 1
Fever, Dr. Hosack on 54
Fever, caused by panic 148
Fever, intermittent, partial 201
Fever from animal putrefaction . 202
Fever, Laennec's report on 240
Fever, congestive, in the sea 249
Fever, remarks on, by Dr. Dawson 394
Fissures, hæmorrhoidal 281
Foderée, M. his case of abortion. 529
Forbes, Dr. John, on the stethoscope, &c. 61
Forceps for extracting teeth perpendicularly 560
Fractures, on non-union of 249
Gairdner, Dr. on perforations of stomach 170
Gairdner, Dr. on purpura hæmorrhagica 193
Gangrene at the mouth of the uterus in puerperal fever 511
Gastritis, a peculiar species of ... 173
Gastritis, Dr. Uwins's view of 391
Gastrodynia, its history and treatment 396
Gastro-enteritis, supposed case of 463
General practitioner, observations on the 246
Glanders, on the cure of 249
Glossitis, Dr. Hosack on 55
Glottis, fatal affection of 458
Goitre, efficacy of iodine in 229
Goitre, its etiology 442
Gout, Dr. Hosack on 58
Gout, anomalous, M. Bayle 187
Grave, fatal effects from opening a 202
Graves, Dr. on free acid in the stomach 145
Greenhow, Mr. on medical remuneration 246
Gregory, Dr. his small pox report 551
Hæmatemesis cured by emetics. 481
Hæmorrhage into the bladder ... 224
Hæmorrhoids, Mr. Calvert and others on 273
Hamilton, Dr. on panic fever ... 148
Hamilton, Mr. on animal effluvia 202
Head, case of severe affection of the 490
Henning, Dr. his dissection 457
Hepatic phthisis 184
Hepatization of the lungs—what 72
Hernia, curious treatment of 211
Hernia, Mr. Yeatman's treatment of 467
Hewson, Mr. on ophthalmia ... 305
Hip-joint amputation, successful 225
Hosack, Dr. miscellaneous papers 53
Hospital reports of M. Laennec. 240
Hospital reports, by M. Cayol .. 460
Hospital reports, by Dr. Hosack. 482
Hutchison, Mr. A. Copeland, operation by 224
Hydrocephalus cured by mercury 501
Hydrophobia, supposed fatal case of 497
Hydrophobia prevented by mercury 499
Idiotcy from nervous injury 469
Idiosyncrasy of individuals, M. Martinet on 433
Incurvations of the spine 132
Infants, ophthalmia of, Mr. Ryall 220
Inflammation of veins, Dr. Duncan 161
Inflammation of nerves, M. Martinet 165
Inflammation of appendix cœci .. 200
Inflammation, hæmorrhoidal 280
Inflammation, Dr. Uwins's remarks on 387
Inflamination of veins, Dr. Chapman's case of 447
Inflammation of veins, Mr. Hodgson's case of 449
Inflammation and irritation of the bronchiæ 451
Intermittent, partial 201
Intermittents denied by Dr. Mills 16
Intestines, perforation of 182
Insanity, Dr. Willis on 360
Intus-susceptio, a remarkable case of 460
Iodine, memoirs on the use of ... 229
Iodine, dangers of 233
Iritis, Dr. Robertson on 468
Iritis, Mr. Melin on 471
Iron, remarks on, by Mr. Phillips 358
Irritable uterus 512
Italian remedies 530
Jaws, anchylosis of 472
Kellie, Dr. on a peculiar spasm in children 454
Kent man of war, fever in 10

Kinglake, Dr. on hernia..... 211
Knife cut out from the stomach. 477
Knife-swallowing, a case of..... 476
Kolley, Dr. on iodine..... 229
Laceration of the womb, case of 406
Lactic acid (free) in the stomach 145
Laennec on auscultation 61
Laennec's report on fever 240
Laryngitis, Mr. Carmichael on.. 223
Lateral curvature, Mr. Bampfield on 133
Ligature and knife, comparison of, for piles 292
Lightning, effects of 149
Lightning, effects of 199
Lithotomy, recto-vesical 474
Liver cough, Dr. Brooke on 208
Lizars, Mr. on extirpation of the ovaria..... 215
Louis, M. on a peculiar gastritis. 173
Macauley, Dr. on the effects of lightning..... 199
Maclean, Dr. on quarantine 1
Maclelland, Dr. amputation of the lower jaw..... 210
Martinet, M. on individual idiosyncrasy..... 433
Martinet, Dr. on neuritis 165
Medical remuneration..... 246
Melanosis, Messrs. Cullen and Carswell on..... 154
Mental derangement, Dr. Willis on 360
Metastasis of rheumatism to the brain..... 431
Miguel, Dr. on the dangers of iodine 233
Mills, Dr. on fever & inflammation 14
Moriarty, Sir T. on hepatic phthisis 184
Montegre, M. on hæmorrhoids.. 273
Mortal dyspnœa, cases of 444
Moxa, Mr. Boyle on 377
Musgrave, Dr. his case of abortion 513
Myers, Dr. on cynanche trachealis 181
Nerves of the spine, anatomy of. 151
Nerves of the spine, inflammation of, Martinet 165
Nervous pain, hæmorrhoidal 282
Nervous injury, a cause of idiotcy 469
Nervous pains, datura stramonium in 492
Nitrate of potash in dropsies ... 531
Nitre extracted from the stomach 487
North, Mr. on peculiar spasms in children 452
Occult disease of the chest—Dr. Carter..... 161
O'Brien, Dr. on sulphate of quinine 227
O'Halloran, Dr. on dysentery ... 234
O'Halloran, Dr. on ophthalmia.. 305
Operation, sudden death in..... 218
Ophthalmia, Mr. Ryall on 220
Ophthalmia, Dr. O'Halloran on. 305
Ophthalmia, Mr. Melin on..... 470
Opium, in puerperal irritability.. 504
Opium, poisoning by..... 235
Œdemato-phlegmonous neuritis . 525
Ovaria, extirpation of 215
Pains, hæmorrhoidal 281
Pahic, the cause of fever..... 148
Paracentesis thoracis..... 96
Paracentesis thoracis..... 213
Paracentesis capitis, Mr. Money's case of 478
Paracentesis thoracis, Morand's case of 480
Pathology of scrofula, Dr. Alison on 99
Pathology of epilepsy, Dr. Reid. 205
Payne, Dr. on puerperal fever... 243
Peritonitis, Laennec's report on. 242
Peritonitis, M. Tacheron on..... 332
Pericarditis, M. Tacheron on.... 326
Pericardium, tympanitic state of. 460
Peripneumony, percussion in ... 69
Perforation of the intestines 182
Percussion, Avenbrugger, &c. on 65
Perforations of the stomach, Dr. Gairdner on..... 170
Persulphate of quinine, formulary of 483
Pharmacopœia, Mr. Phillips on.. 256
Phrenology, Mr. Combe on 251
Phlegmatia dolens, Dr. Hosack on 57
Phillips, Mr. his pharmacopœia . 356
Phthisis, hepatic..... 184
Physic, Drs. Uwins and Dawson on 382
Phosphate of soda in diabetes... 237
Pinch of snuff, pathology of 250
Plague, symptoms of, from animal effluvia..... 202
Pleurisy, Laennec's report on .. 241
Poisoning by opium 235
Poison preserves a human stomach 250
Pneumonia, on the treatment of. 236
Preservation of dead subjects ... 248
Pregnancy and ascites, cases of. 506
Preternatural presentation, case of 507
Pressure on the perineum in labour 530
Prolapsus recti 284
Prospectus of the Crown Company 557
Ptyalism, Mr. Arnott on 153
Pubes, separation of, cases of... 526
Puerperal fever, observations on 243
Puerperal peritonitis, Mr. Davies on 503
Puerperal irritability, Mr. Waller on 503
Puerperal fever of Vienna, report of 509
Puerperal neuritis 523
Puerperal neuritis, its varieties.. 524
Pulse, observations on the 422
Purpura hæmorrhagica 193
Purulent ophthalmia of infants .. 220
Pyramus frigate, fever in 11
Quarantine, Dr. Maclean on 18
Quinine, sulphate of, in typhus.. 237
Quinine, sulphate of, its powers.. 488
Recto vesicle lithotomy 473
Reid, Dr. on epilepsy 205
Remuneration, medical, remarks on 246
Report of the Small-pox Hospital, by Dr. Gregory..... 551
Researches, in physiology, by Dr. Blundell..... 400
Resuscitation, Dr. Roesler on.... 440

Rete mucosum, anatomy of..... 32
Retention of urine in pregnancy, case of 523
Retention of urine, cured by puncture 477
Rheumatism treated by a boiling bath 302
Rheumatism, observations on its metastasis, by Dr. Cox 428
Rhone and Rhine, the waters of. 443
Rupture of dropsical ovary, cases of 404
Ryall, Mr. Isaac, on purulent ophthalmia..... 220
Sanders, Mr. H. on puerperal fever 244
Sand rock spring, salts of the ... 551
Scout sloop of war, fever in.... 12
Scrofula, Dr. Alison on..... 98
Secale cornutum, Dr. Hosack on 59
Sewel, Mr. on contagious glanders 249
Skin, Mr. Chevalier on..... 29
Skin, Mr. Plumbe on..... 29
Skin, Mr. Alibert on 29
Snuff-taking, Dr. Kinglake on... 250
Softening of the stomach..... 173
Sour bread, a supposed cause of goitre..... 442
Spasmodic stricture of the anus.. 300
Spasms in children, a peculiar kind of..... 462
Spinal marrow, construction of.. 151
Spine, Mr. Bampfield on..... 112
Spleen, two cases of loss of 403
Staphyloma cured by tapping.... 475
Stoker, Dr. on fever..... 1
Stomach, curious disease of..... 170
Stomach, tumours in 174
Striking cures..... 234
Subjects, on the preservation of. 248
Sulphate of quinine, M. Bally on 530
Suppression of urine..... 183
Sutleffe, Mr. his book of experience 25
Sympathetic affections of the chest 72
Symptomatology, Dr. Buchan on 413
Syphilitic ophthalmia, Mr. Hewson on 305
Tacheron, pathological researches 326
Tartar emetic ointment in epilepsy 486
Teeling, Dr. on suppression of urine 183
Tetanus, Mr. Carmichael on 193
Texture, cellular, inflammation of 335
Thoracis paracentesis..... 479
Tinct. ferri muriatis..... 359
Tinctara colchici, Mr. Bushell on 531
Tobacco, in dysentery, Dr. O'Beirne on..... 495
Tongue, its different appearances 424
Tonsils, enlargement of, Dr. Belcher 217
Tracheotomy in cynanche trachealis 215
Tracheotomy, Mr. Carmichael.. 223
Transfusion, Dr. Blundell's ideas on 410
Treatment of hernia 211
Treatment of iritis..... 469
Trephine, Mr. Wise on the use of 536
Tumour of great size, removed.. 219
Tumours, hæmorrhoidal 276
Typhus, sulphate of quinine in .. 237
Ulcers of the cornea, Mr. Melin on 472
Ulcers, origin of tight bandaging for 532
Urine, suppression of..... 183
Uterus, irritable, case of..... 512
Uwins's Dr. compendium of medicine..... 382
Vein, air introduced to the heart by 218
Veins, inflammation of..... 161
Veins, a case of inflammation of. 447
Venesection, dangers of..... 336
Venesection in rheumatism..... 429
Venesection, in repeated abortion 519
Vilermay, M. on inflammatian of appendix cœci..... 200
Vital power, M. Martinet on.... 433
Wade, Mr. on fever..... 1
Wedeymeyer, Dr. on paracentesis thoracis..... 213
Westminster Medical Society, its report..... 553
Willis, Dr. on insanity..... 360
Wise, Mr. on the trephine..... 536
Wood, Mr. on purpura hæmorrhagica..... 196
Yellow fever, its distinctions.... 12
Zink, Dr. on iodine 229